A-1 URBAN WATER CONSERVATION GRANT APPLICATION **COVER SHEET**

1. Applicant (Organization or affiliation):	Placer County Water Agency
2. Project Title:	Swimming Pool Cover Incentive Program
3. Person authorized to sign and submit pro	posal:
Name, Title	David Breninger
Mailing address	P.O. Box 6570, Auburn, CA 95604
Telephone	530-823-4864
Fax	530-823-4884
E-mail	DBreninger@pcwa.net
4. Contact person (if different):	
Name, Title	Harley Lukenbill
Mailing address	P.O. Box 6570, Auburn, CA 95604
Telephone	530-823-4864
Fax	530-823-4884
E-mail	HLukenbill@pcwa.net
5. Funds requested (dollar amount):	\$ 58,260
6. Applicant funds pledged (local cost share	e) (dollar amount): \$\frac{\$}{2},420
7. Total project costs (dollar amount):	\$ 77 , 680
8. Estimated net water savings (acre-feet/ye Estimated total amount of water to	•
over <u>5 y</u> ears (project life):	225
Benefit/cost ratio of project for app	olicant: 1.1
Estimated average \$/acre-feet of wa	nter to be saved: \$\\ 345
9. Project life (month/year to month/year):	10/03 - 9/06
10. State Assembly District where the proje	
11. State Senate District where the project i	
12. Congressional District(s) where the proj	
13. County where the project is to be condu	icted: Placer
14. Do the actions in this application involve future changes in land use?(a) Yes	ve physical changes in land use, or potential
(if yes, complete the land use check	
-	obe pdf/Questionnaires EC Permits LandUs
e.pdf and submit it with the proposa	,
(b) No	No

A-2 APPLICATION SIGNATURE PAGE

By signing below, the official declares the following:

The truthfulness of all representations in the application;

The individual signing the form is authorized to submit the application on behalf of the applicant;

The individual signing the form read and understood the conflict of interest and confidentiality section and waives any and all rights to privacy and confidentiality of the application on behalf of the applicant; and

The applicant will comply with all terms and conditions identified in this Application Package if selected for funding.

Signature David Breninger, General Manager
Name and title

November 27, 2002

Date

A-3 APPLICATION CHECKLIST

Complete this checklist to confirm all sections of this application package have been completed.

Part A: Project Description, Organizational, Financial and Legal Information
X A-1 Urban Water Conservation Grant Application Cover Sheet
X A-2 Application Signature Page
X A-3 Application Checklist
X A-4 Description of Project
X A-5 Maps
X A-6 Statement of work, schedule
X A-7 Monitoring and evaluation
X A-8 Qualification of applicant and cooperators
X A-9 Innovation
X A-11 O Agency authority
X A-11 Operation and maintenance (O&M)
Part B: Engineering and Hydrologic Feasibility (construction projects only)
X B-1 Certification statement
X B-2 Project reports and previous studies
X B-3 Preliminary project plans and specifications
X B-4 Construction inspection plan
Part C: Plan for Environmental Documentation and Permitting
X C-1 CEQA/NEPA
X C-2 Permits, easements, licenses, acquisitions, and certifications
X C-2 I crimits, cascinents, necesses, acquisitions, and certifications X C-3 Local land use plans
X C-4 Applicable legal requirements
Part D: Need for Project and Community Involvement
X D-1 Need for project
X D-2 Outreach, community involvement, support, opposition
Part E: Water Use Efficiency Improvements and Other Benefits
X E-1 Water use efficiency improvements
X E-2 Other project benefits
Part F: Economic Justification, Benefits to Costs Analysis
X F-1 Net water savings
X F-2 Project budget and budget justification
X F-3 Economic efficiency
Appendix A: Benefit/Cost Analysis Tables
X Tables A-1; A-2; A-3; A-4a, A-4b, A-4c, A-4d; and A-5
Appendix B: Project Manager Resume
Appendix C: Placer County Water Agency Act
Appendix D: Splash or Sprinkle? Comparing the Water Use of Swimming Pools
and Irrigated Landscapes
Appendix E: American River Pump Station Project – Record of Decision,
September 2002 and Board of Director's Minutes, July 11, 2002
Appendix F: Letter of Support

A-4 DESCRIPTION OF PROJECT

This project consists of providing a financial incentive program for the installation of swimming pool covers on residential, commercial, and institutional pools in the service area. The purpose of this project is to provide financial incentive to customers to purchase swimming pool covers in order to decrease unusable swimming pool water evaporative losses to the atmosphere. The swimming pool cover rebate program is being initiated to encourage consumer purchase of water saving products and support the effort to encourage water conservation in northern California.

Although swimming pool cover rebates will be available for all Placer County Water Agency (PCWA) customers, the focus of this rebate program will be in PCWA's Zone 1, which extends from the City of Auburn south to the northern boundary of the City of Roseville in western Placer County, as seen on Figure 1. Zone 1 is the largest of PCWA's four zones, and consists of the most residential and commercial customers. Zone 1 is also located in a higher evapotranspiration zone than the other PCWA areas.

Swimming pool conservation including covers to reduce evaporation is listed as a potential best management practice (BMP) in Exhibit 1 of the California Urban Water Conservation Council Memorandum of Understanding Regarding Urban Water Conservation in California. This type of program is a new and innovative approach to conserving water that would normally be lost to evaporation. This project will provide methodology and supporting data on an innovative method to further reduce similar unusable losses of water in California.

PCWA will promote the rebate program through their customer outreach newsletter as well as on bill inserts. PCWA will also contact by telephone commercial and institutional customers with pools over 2,000 square feet (ft²). Swimming pool equipment and supply stores in the service area will also be provided information to pass onto their customers. The address at which the pool cover will be used will be required to be within the PCWA service area in order for the customer to receive the swimming pool cover rebate. To apply for a swimming pool cover rebate, customers will complete a rebate application and submit it to the PCWA office. All funds will flow through PCWA to the customers on approval of rebate applications.

It is estimated that there are approximately 2,800 residential and commercial/institutional pools within the PCWA service area. The goal of this project is to distribute 600 residential rebates and 30 commercial and institutional rebates over 3 years. Each residential rebate will be \$75. Each non-residential rebate will be \$400. It is expected that this swimming pool cover rebate program will save 45 ac-ft per year of water over 5 years. This program will cost \$77,680. This results in a project benefit to cost ratio of 1.1.

A-5 MAPS

A map of the location of the general project area is provided in Figure 1.

A-6 STATEMENT OF WORK, SCHEDULE

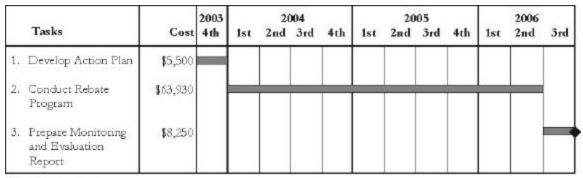
Statement of Work. This project is to provide a financial incentive towards the purchase and use of swimming pool covers. The costs of the project primarily involve the pool cover rebate to the customer and administrative costs to implement the three-year program.

Approximately 630 rebates will be issued over the three-year program. To apply for a swimming pool cover rebate, customers will complete a rebate application and submit it to the PCWA office. The rebate application will request the following information from the customers. This information will be used to determine rebate approval to the applicant and to estimate water savings as a result of the rebate, as discussed in Section A-7 of this application.

- Address at which pool cover is used
- Name of property owner
- Phone number
- Type of pool use (residential, commercial, institutional (school))
- Make and model of pool cover purchased (include copy of receipt)
- Date of pool cover purchase (must be purchased between October 1 2003 and June 31, 2006)
- Customer identification number (as shown on customer's water bill)
- Age of customer's swimming pool
- Area of pool shaded at 2:00 pm in the afternoon sun (10%, 25%, 50%, 75%, 100%)
- Is pool protected from wind? (no, partially, completely)
- Surface area of pool (length and width, or diameter)
- Will customer use pool cover regularly when pool is not in use?

The tasks for implementation of this project and the project schedule are described below and presented on Figure 2. The schedule includes deliverable items, due dates, and projected costs for each task. Table 1 presents a quarterly expenditure projection. The scope of the project consists of three tasks:

- 1. Develop Action Plan. This includes development of a list of commercial and institutional large pool (over 2,000 square feet) owners. This also includes development of program information and advertising material.
- 2. Conduct Rebate Program. This includes distributing program information and contacting large commercial and institutional pool owners. This also includes administering the actual rebates.
- 3. Prepare Monitoring and Evaluation Report. This report will be written following the end of the project. It will include results rebates distributed and the resulting water use and estimated water savings.



♦ Deliverable items

Figure 2. Project Timeline

Table 1. Quarterly Expenditure Projection

Quarter	Months Expenditure	
2003		
4	October-December	\$5,500
<u>2004</u>		
1	January-March	\$6,393
2	April-June	\$6,393
3	July-September	\$6,393
4	October-December	\$6,393
<u>2005</u>		
1	January-March	\$6,393
2	April-June	\$6,393
3	July-September	\$6,393
4	October-December	\$6,393
<u>2006</u>		
1	January-March	\$6,393
2	April-June	\$6,393
3	July-September	\$8,250
Total		\$77,680

A-7 MONITORING AND EVALUATION

A list of project-specific performance measures that will be used to document water savings and assess project success is as follows:

- 1. The project performance will be measured by the estimated amount of water saved as a result of using pool covers on customer swimming pools. On the rebate application, the customer will submit information including their address, customer identification number, pool size, and other items listed in Section A-6 of this application. Since all customers are metered, PCWA will be able to determine the change in water use from a period of water use prior to use of the pool cover to period of water use following use of the pool cover.
- 2. A Monitoring and Evaluation Report will be prepared following project completion. This report will monitor and assess the before and after water use in the PCWA Zone 1 service area for those customers that took advantage of the rebate program. The report will also summarize all rebates distributed. Using customer metered water use data, the size of the swimming pool, and normalizing for weather and other specific conditions of the water year, PCWA will determine the water savings due to use of pool covers. The results of these measurements will be documented in the Monitoring and Evaluation Report.

The Monitoring and Evaluation Report will be made available to the public at the PCWA office and through various outreach methods.

A-8 QUALIFICATIONS OF THE APPLICANT AND COOPERATORS

The project manager for this project will be Harley Lukenbill, of PCWA. His resume is included in Appendix B. Harley Lukenbill is the water efficiency manager of PCWA.

External cooperators include pool service and supply stores, pool cover manufactures, retail distributors, and water customers.

A-9 INNOVATION

This project consists of implementing an innovative water use efficiency measure that could contribute to improved efficiencies in similar projects throughout the state. Swimming pool conservation including covers to reduce evaporation is listed as a potential best management practice in Exhibit 1 of the California Urban Water Conservation Council Memorandum of Understanding Regarding Urban Water Conservation in California. This type of program is a new and innovative approach to conserving water that would normally be lost to evaporation. This project will provide methodology and supporting data on an innovative method to further reduce similar unusable losses of water in California.

This project will provide actual data from the program in the Monitoring and Evaluation Report, providing information on the effectiveness of the program. Also, this project will define actual water savings resulting from a swimming pool cover rebate program. This is a potential BMP that does not have much water savings supporting data, but is intuitively known to reduce unusable water losses. Also, the rebate applications that will be developed through this program will help contribute to the success of other programs like this throughout the State.

A-10 AGENCY AUTHORITY

1. Does the applicant have the legal authority to submit an application and to enter into a funding contract with the State? Provide documentation such as an agency board resolution or other evidence of authority.

During their meeting on November 7, 2002, the PCWA Board of Directors authorized David Breninger, the general manager, to submit this funding application and enter into a funding contract with the State. Documentation of this authority will be provided if requested.

2. What is the legal authority under which the applicant was formed and is authorized to operate?

A county water agency. See Appendix C for the Placer County Water Agency Act.

3. Is the applicant required to hold an election before entering into a funding contract with the State?

No.

4. Will the funding agreement between the applicant and the State of California be subject to review and/or approval by other government agencies? If yes, identify all such agencies (e.g. Local Area Formation Commission, local governments, U.S. Forest Service, California Coastal Commission, California Department of Health Services, etc.).

No.

5. Is there any pending litigation that may impact the financial condition of the applicant, the operation of the water facilities, or its ability to complete the proposed project. If none is pending, so state.

There is no pending litigation impacting the Agency's ability to enter into the proposed grant.

A-11 OPERATIONS AND MAINTENANCE

This section does not apply to this project since there are no operations and maintenance costs with this project.

PART B—ENGINEERING AND HYDROLOGIC FEASIBILITY

B-1 CERTIFICATION STATEMENT

I, Paul Selsky, a California registered civil engineer, have reviewed the information presented in support of this application. Based on this information, and any other knowledge I have regarding the proposed project, I find that it can be designed and operated to accomplish the purpose for which it is planned. The information I have reviewed to document this statement is listed as follows:

- Statement of work and schedule provided within this application.
- Review of budget provided within this application.
- Review of economic analysis provided within this application.
- 2000 Urban Water Management Plan (Brown and Caldwell, 2000.)



(Original signature and stamp with expiration date)

B-2 PROJECT REPORTS AND PREVIOUS STUDIES

PCWA has a year 2000 Urban Water Management Plan (Brown and Caldwell, December 2000). This plan identifies future multiple dry year water supply deficits.

B-3 PRELIMINARY PROJECT PLANS AND SPECIFICATIONS

Since this project does not involve construction, no plans and specifications are provided.

B-4 CONSTRUCTION INSPECTION PLAN

Since this project does not involve construction, no construction inspection plan is provided. The rebate program will be administered by PCWA staff.

PART C—PLAN FOR COMPLETION OF ENVIRONMENTAL **DOCUMENTATION AND PERMITTING REQUIREMENTS**

C-1 CALIFORNIA ENVIRONMENTAL QUALITY ACT AND NATIONAL ENVIRONMENTAL POLICY ACT

This project is not subject to CEQA or NEPA.

C-2 PERMITS, EASEMENTS, LICENSES, ACQUISITIONS, AND CERTIFICATIONS

No permits, easements, licenses, acquisitions, or certifications are required for this project.

C-3 LOCAL LAND USE PLANS

There are no relevant local plans.

C-4 APPLICABLE LEGAL REQUIREMENTS

There are no applicable legal requirements.

PART D- NEED FOR PROJECT AND COMMUNITY INVOLVEMENT

D-1 NEED FOR THE PROJECT

Need for This Project. This project is needed to reduce water losses due to evaporation of swimming pool water in customer residential and commercial/institutional pools. The efficient use of California's limited water supplies is a critical local, regional, and statewide water issue. The purpose of this project is to significantly increase water use efficiency by reducing the amount of unusable water loss that is particularly critical in dry-years. This project will provide benefit to the Bay-Delta by ensuring that water diverted upstream is used efficiently.

Water System Condition. This program will target swimming pools in Zone 1. Zone 1 is PCWA's largest service area. Placer County Water Agency is a public agency established in 1957 by a special Act of the California Legislature (Placer County Water Agency Act, Statutes of 1957, Chapter 1234). Its boundaries are the same as Placer County. Placer County Water Agency provides water to approximately 150,000 people in Placer County located in five separate retail zones. PCWA directly serves about 35,000 agricultural, municipal, and industrial connections in the cities of Auburn, Colfax, Loomis, Newcastle, Rocklin and many other small communities. PCWA also makes wholesale deliveries of water to San Juan Water District, the City of Roseville, and the City of Lincoln.

The current main source of water is from the Yuba and Bear Rivers. The supply comes from Lake Spaulding and is purchased from Pacific Gas and Electric Company. Other sources of water include the American River, the Central Valley Project, and groundwater wells. Treated and untreated water use for the year 2000 was projected as 114,525 acrefeet (Brown and Caldwell, Urban Water Management Plan, 2000).

The current sources of water for Zone No. 1 facilities comes from the PG&E's Wise/South Canal, PCWA's Boardman Canal, and the American River. This water is used to supply the Agency's Bowman, Auburn, Foothill, and Sunset Water Treatment Plants as well as raw water customers. PCWA serves wholesale treated water to the City of Lincoln and other property owner associations. Water is supplied to lower Zone No. 1 during the summer from the American River by temporary pumps located near the proposed Auburn Dam site.

According to PCWA's Urban Water Management Plan, a deficit is projected at 2020 during year two and three of a multiple dry water year event. Under these conditions, it is anticipated that the Agency would make cutbacks to its customers. Table 2 presents the projected year 2020 water supply and demand comparison for normal, single, and multiple dry water years for Zone No. 1. Given this future supply versus demand comparison, the value of reducing water losses is extremely important.

Table 2. Zone 1 Supply Reliability and Demand Comparison⁶, 2020, ac-ft/yr

	Average/normal	Single dry water	Mu	Multiple dry water years		
	water year	year	Year 1	Year 2	Year 3	
Water Supply						
PG&E Supply ¹	100,400	75,300	75,300	65,260	50,200	
Middle Fork American River Supply ²	120,000	120,000	120,000	120,000	120,000	
Central Valley Project Supply ¹	35,000	26,250	26,250	22,750	17,500	
Recycled Water ³	10,000	10,000	10,000	10,000	10,000	
Total supply	265,400	221,550	221,550	208,010	187,700	
Projected Water Demands, 2020						
PCWA	162,500	162,500	162,500	154,000	138,000	
City of Roseville ⁴	30,000	30,000	30,000	30,000	30,000	
San Juan Water District ⁴	25,000	25,000	25,000	25,000	25,000	
Northridge Water District ⁵	29,000	0	0	0	0	
Total demand	246,500	217,500	217,500	217,500	217,500	
Surplus or (Deficit)	18,900	4,050	4,050	(9,490)	(29,800)	

Source: Brown and Caldwell, 2000. Placer County Water Agency Urban Water Management Plan. Notes:

- 1. A supply reduction of 25%, 35%, and 50% for years 1 through 3 respectively is assumed.
- 2. It is assumed that multiple dry water years will have no impact on supply due to the amount of upstream storage.
- 3. Assumed amount.
- 4. Full contract amount is shown for 2020. Actual amount to be delivered during dry water supply years will be determined by the Agency.
- 5. Based on the Northridge Water Supply Contract, no amount will be supplied during dry water supply years.
- 6. This table contains both Zone 1 and Zone 5 supply and demand since they receive water from the same sources.

Consistency with Regional Plans. PCWA officials understand the complexities, interrelationships and importance to sustain reliable and affordable water and energy for Placer County. Current PCWA activities include involvement in issues affecting the Lake Tahoe and Truckee River system; the American River system; the Yuba/Bear Rivers system; the Central Valley Project and Bay/Delta system; watershed management collaborations; groundwater management; PCWA water entitlements; electric deregulation, and hydroelectric divestiture. PCWA officials are in close communication with local, regional, State and Federal officials plus private sector representatives and members of the public and community on water and energy issues affecting Placer County's present and future needs

This project is compatible with PCWA's ongoing efforts to achieve greater water use efficiency. PCWA's Board of Directors recognizes the importance of water management and conservation programs. PCWA's adopted rules and regulations include the general policy of the water system that states in part that the PCWA will operate and maintain the water system in an efficient and economical manner and distribute and supply water as fairly and equitably as possible.

PCWA is a member of the Water Forum. In the year 2000, the Water Forum finalized the Water Forum Agreement, which contains seven major elements to meet its objectives. Water conservation is the fifth major element in the Water Forum Agreement. The water conservation portion of the Water Forum Agreement describes each water purveyor's commitments to implement BMPs. These BMPs were derived from the original MOU developed by the CUWCC, and then customized for the Water Forum conservation

agreements prepared for the individual purveyors. This project is consistent with the *Water Forum Agreement*.

Swimming pool conservation including covers to reduce evaporation is listed as a potential best management practice in Exhibit 1 of the California Urban Water Conservation Council Memorandum of Understanding Regarding Urban Water Conservation in California. This type of program is a new and innovative approach to conserving water that would be normally loss to evaporation if this program was is enacted. This project is consistent with the potential BMP and will provide methodology and supporting data on an innovative method to further reduce unusable losses of water in California.

Description of Impacts. The main impact of not implementing this project would be the continued loss of water to evaporation from existing and future swimming pools. The project is within the CALFED solution area. The efficient use of California's limited water supplies is a critical local, regional, and statewide water issue. PCWA utilizes surface water from the Yuba River, American River, and the Bear River as part of its water supply. The purpose of this project is to significantly increase water use efficiency by providing incentive for the use of pool covers. This project will provide benefit to the Bay-Delta by ensuring that water diverted upstream is used efficiently. This project would assist in meeting CALFED goals such as:

- (1) Reduce water demand through "real water" conservation.
- (2) Maximize use of available water supplies through conservation.

This project will positively impact the Bay-Delta systems by increasing instream flows and reducing the overall reliance on the surface water supplies from the American and Sacramento Rivers upstream from the Bay-Delta. The Regional Water Authority and its member agencies' conservation efforts are an important part of a long-term, comprehensive effort to reduce pressure on the Bay-Delta system to meet regional and statewide water needs. One of the fundamental objectives of the CALFED Bay-Delta program is to reduce the mismatch between Bay-Delta water supplies and the current and projected beneficial uses dependent on the Bay-Delta system. Water use efficiency projects are one of the cornerstone strategies the CALFED Bay-Delta program is deploying to achieve this objective. Actual incentives for the purchase of swimming pool covers will reduce the demand for a significant urban end-use of Bay-Delta water supplies.

D-2 OUTREACH, COMMUNITY INVOLVEMENT, SUPPORT, OPPOSITION

This project is consistent with the California Urban Water Conservation Council's Memorandum of Understanding regarding water conservation. It is also consist with the Sacramento Water Forum Agreement and Regional Water Authority goals and objectives. A letter of support from the Regional Water Authority is included in Appendix F.

Information on the results of this project will be disseminated through the PCWA's public outreach program. PCWA operates an extensive public information program and associated schools program, which provide materials, speakers, and outreach activities to the general public.

Outreach activities will include publications and Web site development, public meetings, PCWA participation at community events, multimedia campaigns, interagency

partnerships, corporate environmental fairs, professional trade shows, water conservation workshops and seminars and a speaker's bureau.

Summaries of the results and benefits of this project will be developed by PCWA staff and made available to PCWA customers. Inserts will be included in billing mailer inserts, newsletters, and agency Web sites.

Because this project provides a regional-wide benefit, outreach efforts will not focus on any particular customer sector. Due to the nature of this project it is neither appropriate nor practical to extend the project to specifically target disadvantaged communities within the County. There are no tribal entities particularly impacted by this project.

No other local agencies will be involved with this project. There are no known parties in opposition to the project.

PART E—WATER USE EFFICIENCY IMPROVEMENTS AND OTHER BENEFITS

E-1 WATER USE EFFICIENCY IMPROVEMENTS

The direct, quantifiable improvements in water use efficiency are the reductions in evaporation water losses due to use of swimming pool covers at 630 sites in the PCWA service area. The area is within Climate Zone 14, which has an evaporation rate of over 57 inches per year. It is assumed that there is an average water evaporation savings of 0.4 ac-ft per residential pool and 0.9 ac-ft per commercial/institutional pool for the 5-year project life. This project will result in total annual average water savings of 45 ac-ft per year or 225 ac-ft over a 5-year period. Section F of this application describes in further detail the determination of these water savings.

E-2 OTHER PROJECT BENEFITS

There are multiple expected beneficial outcomes of this project. The value of those outcomes is both quantifiable and non-quantifiable. This project is within the CALFED solution area. Other benefits that will occur as a result of this project and the beneficiary of each benefit are listed in Table 3. Project outcomes and benefits will be shared among the project's beneficiaries and will directly or indirectly contribute to CALFED goals.

Table 3. Other Benefits

Physical change	Expected benefit	Beneficiary
Reduced consumptive water use in system will	Improved Bay-Delta ecosystem.	CALFED goal
allow PCWA to delay the date of need to use their	2. Increased water supply reliability.	
full water right entitlements	 Increased water supply reliability to water users while at the same time assuring the availability of sufficient water to meet fishery protection and restoration recovery needs. 	
	More water for Bay-Delta use. Energy savings as a result of less water pumped into the system.	
	Improved aquatic and terrestrial habitat in South Yuba and American Rivers.	
	More water available to meet fishery protection and restoration recovery needs now.	
Less water pumped into the system	Energy savings ¹	Energy provider/ PCWA

⁽¹⁾ Not quantified for this application.

PART F - ECONOMIC JUSTIFICATION: BENEFITS TO COSTS

F-1 NET WATER SAVINGS

This project will provide a net water savings by reducing the loss of water that would otherwise be made unusable by being lost to the atmosphere. This project will result in total annual average net water savings of 45 ac-ft/year, or 225 ac-ft over a 5-year period. Listed and explained are the major analysis assumptions for net water savings for this project.

- 1. The average annual evapotranspiration for the project area is 57.04 in/yr (California Irrigation Management Information System, 1999). The PCWA Zone 1 is located within the Reference Evapotranspiration Zone 14, which is described to have high summer sunshine and wind in some locations.
- 2. It is assumed that 75 percent of pool water loss to evaporation can be saved through the use of a swimming pool cover. This is based on information for the Handbook of Water Use and Conservation (Amy Vickers, 2001), which estimates 95 percent of evaporation, can be saved by use of a pool cover. This is also based on a report titled "Splash or Sprinkle: Comparing the Water Use of Swimming Pools and Irrigated Landscapes" (Maddaus, Mayer, 2001. AWWA Conference) (Appendix D), which estimates that 30 percent of water loss due to evaporation can be saved by use of a pool cover. These two quantities are combined for the purpose of this project.
- 3. The average residential pool surface area is estimated to be 800 ft2. The average commercial/institutional pool surface area to receive a rebate under this project is estimated to be 2,250 ft2.
- 4. Average annual evaporation water savings per residential rebate is 0.07 ac-ft/yr. Average annual evaporation water savings per commercial/institutional rebate is 0.18 ac-ft/yr This is based on the following calculations:
 - 0.07 ac-ft/year/residential pool cover = $(75\%)(57.04 \text{ in/yr})(1\text{ft/12in})(800 \text{ ft}^2/\text{pool cover})(1 \text{ acre}/43,560\text{ft}^2)$
 - 0.18 ac-ft/year/com@inst pool cover = $(75\%)(57.04 \text{ in/yr})(1\text{ft/}12\text{in})(2,250 \text{ ft}^2/\text{pool}$ cover)(1 acre/43,560ft²)
- 5. The water savings that would result from for this project is estimated to be approximately 45 ac-ft/year (28 gallons per minute (gpm)). This is based on 600 residential and 30 non-residential rebates being distributed.
- 6. A total of 630 (600 residential and 30 commercial and institutional) customers will receive financial incentives to purchase swimming pool covers in this project. It is estimated that 210 rebates will be awarded in 2004, 210 rebates will be awarded in 2005, and 210 rebates will be awarded in 2006.
- 7. It is estimated that there are approximately 2,800 residential and commercial/institutional pools within the PCWA service area. This is based on the

assumption that number of pools within the PCWA service area is proportional to the number of new pools installed from 1987 to 2000 in the City of Rocklin as compared to the number of housing units in the PCWA service area and the City of Rocklin in the year 2000. In the year 2000 there were over 1,750 pools in the City of Rocklin (City of Rocklin, 11/14/2002. Summary of Building Permits Issued Calendar Years 1987-2002.). The City of Rocklin had approximately 15,000 housing units in 2000 (US Census Bureau, 2000). Based on this information, approximately 12% of the housing units have pools in the City of Rocklin.

Using this same percentage for the entire PCWA Zone 1, which has over 24,000 housing units and commercial/institutional connections, it is assumed there are a total of 2,800 pools. Assuming 95% of the pools are residential and 5% are commercial/institutional based on the proportion of residential and commercial/institutional connections in PCWA Zone1, it is assumed that PCWA Zone 1 has approximately 2,650 residential pools and 150 commercial pools. The 630 rebates included with this project will result in a 23% coverage or penetration of the total swimming pool stock.

8. The effective life of each rebate is 5 years. For the purposes of this project, it is estimated that the average useful life a swimming pool cover is 5 years. The life span of a swimming pool solar blanket pool cover is 3-5 years with warrantees available for 3 and 5 years (Woody McDowell, Aquanet.net, Inc. Personal communication: e-mail. November 9, 2002. aquanet@exis.net).

F-2 PROJECT BUDGET AND BUDGET JUSTIFICATION

Table 4 describes in detail the project budget, including a description and justification for each item in the budget. This budget information is entered into Table A-1. There are no annual costs for administration, operations, and maintenance following the completion of this project since this project involves distribution of a rebate and does not involve further agency contact following the administration of the rebate. This is shown in Table A-2.

Item Justification Budget Land purchase/easement Not applicable. \$5,000 Planning/design/engineering This item includes the cost to develop the action plan, design the rebate program, develop list of commercial/institutional large pool owners, advertising, applications. \$75 per residential rebate, \$400 per commercial/institutional \$57,000 Materials/installation rebate. Not applicable. Structures Not applicable. Equipment purchases/rentals Not applicable. Environmental mitigation/enhancement Construction administration/ \$10 per rebate for PCWA administration and overhead. \$6,300 overhead Legal & license fees Not applicable. Other Preparation of Monitoring and Evaluation Report. \$7,500 \$1,880 Contingency 10% \$77,680 Total

Table 4. Project Budget

Note: A 10% contingency is applied to planning/design/engineering, construction administration/overhead, and preparation of the monitoring and evaluation report. A contingency is not applied to the actual rebates.

PCWA is requesting 75 percent (\$58,260) in funding from the Proposition 13 Urban Water Conservation Program. PCWA will commit to a cost share of 25 percent (\$19,420) of the total project costs.

F-3 ECONOMIC EFFICIENCY

The main benefit resulting from this project will be the net water savings. The economic value of these benefits is based on the value of the project's real water savings.

This project is locally cost effective to PCWA. Based on the benefit-cost ratio assessment in Appendix A, tables A-1 through A-5, using project benefits and costs, the project has a benefit to cost ratio of 1.1. Since this number is greater than one, it indicates an economically justifiable project.

This section discusses the value of the project's water supply. As noted in the grant application package (page 24), the value of the project's water supply is determined in most cases by either the reduction in water supply from the most expensive source, the least—cost alternative to augment water supplies, or the revenue generated by selling water. The application package recognizes that it is possible that a combination of benefits can occur. PCWA is a water agency that needs to augment its water supplies. Therefore, the value of the project's water supply for this application is measured by the least-cost water supply alternative that may be eliminated or delayed because of the project. Since this project targets saving treated potable water, the value of the project's water supply must include the cost of treatment.

There are several possible approaches to define the value of the water saved from the water use efficiency project addressed by this grant application. For comparison purposes, this section describes the value of saved water based on four approaches. The section concludes with the value of saved water assumed for this grant application.

Current Treated Water Wholesale Cost. PCWA currently provides wholesale treated water to the City of Lincoln. This water is sold at a cost of approximately \$450 per ac-ft. This represents the cost of diverting the raw water and transporting via the canal system to a treatment plant, the cost of treating the water to meet drinking water standards, and the cost of transmitting the treated water to the point of connection with the City of Lincoln water system. The City of Lincoln previously paid a fee to establish this water service. This cost does not include the cost of obtaining new water supplies. This cost also does not include the cost of constructing and operating the local treated water distribution system.

Cost of Individual Service Connection. This approach assumes that the cost of a new service connection is a surrogate for the value of a new treated water supply. The cost of an individual service connection is approximately \$8,000 per equivalent dwelling unit (EDU). An EDU uses an annual average of 550 gallons per day. The connection fee is equivalent to an annual cost of \$507, based on 6% and a 50-year life. Therefore, the cost of a new service connection is equivalent to \$822 per ac-ft. The cost of a service connection buys capacity in the water supply diversion, delivery, and treatment system. It does not include the annual operation and maintenance costs needed to divert, deliver, and

treat the water. With these other annual costs, the cost of new water is greater than \$1,000 per ac-ft.

Future Raw Water Supply. The only water supply project currently being planned by PCWA is the American River pump station project near Auburn, California. This project, once it is completed, will allow PCWA to divert 35,500 ac-ft of water per year from the American River. The water that would result from this project is very small in comparison to the water supply project. Therefore, any project delays that could result from the implementation of the project described in this grant application would be very small. Some of the American River supply has been diverted by PCWA on a seasonal basis through the use of a temporary pump station.

The American River pump station project has gone through the CEQA and NEPA process and is now under engineering design. The final environmental impact report for the American River pump station project was issued in June 2002, and can accessed at http://www.mp.usbr.gov/ccao/PCWA-EIR-EIS/. The record of decision regarding the pump station project can be accessed at http://www.mp.usbr.gov/ccao/docs/ROD-AmRiverPumpSta.pdf. Board minutes that document that the project is being formally considered can be accessed at http://www.pcwa.net/level3/pdf/archived/minutes/07-11-2002.pdf, and is provided in Appendix E. Additional documentation regarding this project can be provided to the Department of Water Resources if requested.

The American River project is estimated to have a construction cost of \$31 million. Using a 50-year project life and a 6% discount rate (capital recovery factor 0.0634) gives an annual cost of \$2.0 million per year or \$55 per ac-ft. The power cost to pump the water from the American River up to the elevation of the service area is \$65 per ac-ft. The assumed cost of operation and maintenance is \$1.5 million per year (5% of construction cost) or \$42 per ac-ft. The value of the project's raw water supply is the sum of these costs, or \$162 per ac-ft.

Treatment of Future Water Supply. PCWA is currently expanding the capacity of its Foothill Water Treatment Plant. This project provides a benchmark for the cost of providing the treatment for new water supplies. The treatment plant is being expanded from 27 to 55 million gallons per day (mgd), for a total expansion of 28 mgd, for a construction cost of \$22 million. This expansion will provide approximately 14,900 ac-ft per year (using a 2.1 maximum day peaking factor). Using a 50-year project life and a 6% discount rate (capital recovery factor 0.0634) gives an annual cost of \$1.4 million per. Adding an operation and maintenance cost of \$1 million per year (5% of construction cost) results in a unit cost of \$161 per ac-ft. This cost does not include water conveyance costs.

Summary. Table 5 provides a summary of the value of water as defined by the four methods discussed in this section.

Table 5. Value of Water

	Value of water,	
Approach	\$ per ac-ft	Remarks
Current Treated		Connection fee and local pipes not
Wholesale Water	450	included.
Individual Treated Water		Does not include operation and
Connection	822	maintenance costs.
Future Raw Water		Based on American River pump
Supply	162	station project.
Treatment of Future		Based on Foothill WTP project.
Water Supply	161	Piping not included.

Based on the presented approaches to defining a value of treated water, the high end value is \$1,000, which is the cost of an individual new treated water service connection plus a cost of \$200 per ac-ft for annual operation and maintenance costs. The low end value is \$323 plus the cost of conveyance of new water. For this application the value of water generated by this project is assumed to be \$450 per ac-ft. This value of new water is at the lower end of the cost range defined by the various approaches.

Table A-4b documents a portion of the cost of the alternative cost of a future water supply to arrive at an annual cost. The portion is based on the proportion of the acre feet of water savings per year resulting from this project versus the total water supply yield for the alternative water supply project. This annual cost is equivalent to taking the \$450 per ac-ft value of water times the annual water savings resulting from this project.

APPENDIX A

Benefit/Cost Analysis Tables

Table A-1: Capital Costs

	Capital Cost Category (a)	Cost (b)	Contingency Percent (c)	Contingency \$ (d)	Subtotal (e)
				(bxc)	(b+d)
(a)	Land Purchase/Easement			\$0	\$0
(b)	Planning/Design/Engineering	\$5,000	10%	\$500	\$5,500
(c)	Materials/Installation	\$57,000	-	\$0	\$57,000
(d)	Structures		-	\$0	\$0
(e)	Equipment Purchases/Rentals		-	\$0	\$0
(f)	Environmental Mitigation/Enhancement		-	\$0	\$0
(g)	Construction/Administration/Overhead	\$6,300	10%	\$630	\$6,930
(h)	Project Legal/License Fees			\$0	\$0
(i)	Other – Prepare Project Report	\$7,500	10%	\$750	\$8,250
(j)	Total (1) (a + + i)	\$75,800		\$1,880	\$77,680
(k)	Capital Recovery Factor: use Table 6 (5 years)				0.2374
(I)	Annual Capital Costs (j x k)				\$18,441

⁽¹⁾ Costs must match Project Budget prepared in Section F-2.

Table A-2: Annual Operations and Maintenance Costs

Administration (a)	Operations <i>(b)</i>	Maintenance (c)	Other (d)	Total (e)
\$0	\$0	\$0	\$0	\$0

Table A-3: Total Annual Costs

Annual Capital Costs (1) (a)	Annual O&M Costs (2) (b)	Total Annual Costs (c) (a+b)
\$18,441	\$0	\$18,441

⁽¹⁾ From Table 1 line (1)

(2) From Table 2 Total, column (e)

⁽²⁾ Note: A 10% contingency is applied to planning/design/engineering, construction administration/overhead, and preparation of the monitoring and evaluation report. A contingency is not applied to the actual rebates.

Table A-4: Water Supply Benefits

Net water savings (acre-feet/year) 45

A-4a. Avoided Costs of Current Supply Sources

Sources of Supply	Cost of Water (\$/AF)	Annual Displaced Supply (AF)	Annual Avoided Costs (\$)
(a)	(b)	(c)	(d) (b x c)
Total			

A-4b. Alternative Costs of Future Supply Sources (see note 2 below)

Future Supply Sources (a)	Total Capital Costs (\$)	Capital Recovery Factor (1)	Annual Capital Costs (\$) (d) (b x c)	Annual O&M Costs (\$) (e)	Total Annual Avoided Costs (\$) (f) (d + e)
American River Auburn Pump Station Project - for 45 ac-ft/yr (Auburn pump station will provide a total of 35,500 ac-ft/yr. Capital costs and O&M under this project are the proportion of 45 ac-ft/yr to 35,500 ac-ft/yr)	\$39,296	0.0726	\$2,853	\$3,803	\$6,656
Treatment of future supply source (Total project will cost \$22 million to treat 14,900 ac-ft/yr with an O&M cost of \$1 million. Capital and O&M costs under this project are the proportion of 45 ac-ft/yr to 14,900 ac-ft/yr.)	\$66,443	0.0726	\$4,824	\$3,020	\$7,844
Supply conveyance and distribution (infrastructure, appurtenances, etc)	\$79,295	0.0726	\$5,757	\$0	\$5,757
Total					\$20,256

^{(1) 6%} discount rate; Use Table 6- Capital Recovery Factor

(2) Note: This annual cost is equivalent to the value of saved water times the annual water saved (45 ac-ft/yr X \$450/ac-ft).

A-4c. Water Supplier Revenue (Vendibility)

Parties Purchasing Project Supplies	Amount of Water to be Sold	Selling Price (\$/AF)	Expected Frequency of Sales (%) (1)	Expected Selling Price (\$/AF)	"Option" Fee (\$/AF) (2)	Total Selling Price (\$/AF)	Annual Expected Water Sale
(a)	(b)	(c)	(d)	(e) (c x d)	(f)	(g) (e + f)	Revenue (\$) (h) (b x g)
Total							

- (1) During the analysis period, what percentage of years are water sales expected to occur? For example, if water will only be sold half of the years, enter 50% (0.5).
- (2) "Option" fees are paid by a contracting agency to a selling agency to maintain the right of the contracting agency to buy water whenever needed. Although the water may not be purchased every year, the fee is usually paid every year.

A-4d: Total Water Supply Benefits

(a) Annual Avoided Cost of Current Supply Sources (\$) from 4a, column (d)	\$0
(b) Annual Avoided Cost of Alternative Future Supply Sources (\$) from 4b, column (f)	\$20,256
(c) Annual Expected Water Sale Revenue (\$) from 4c, column (h)	\$0
(d) Total Net Annual Water Supply Benefits (\$) (a + b + c)	\$20,256

Table A-5: Benefit/Cost Ratio

Project Benefits (\$) (1)	\$20,256
Project Costs (\$) (2)	\$18,441
Benefit/Cost Ratio	1.10

- (1) From Tables 4d, row (d): Total Annual Water Supply Benefits
- (2) From Table 3, column (c): Total Annual Costs

Table A-6: Capital Recovery Factor (Use to obtain factor for Table 1, Line k or Table 4b, Column (c)

` '
Capital Recovery Factor
0.2374
0.2034
0.1791
0.1610
0.1470
0.1359
0.1268
0.1193
0.1130
0.1076
0.1030
0.0990
0.0954
0.0924
0.0896
0.0872
0.0850
0.0830
0.0813
0.0797
0.0782
0.0769
0.0757
0.0746
0.0736
0.0726
0.0718

Life of Project (in years)	Capital Recovery Factor	
32	0.0710	
33	0.0703	
34	0.0696	
35	0.0690	
36	0.0684	
37	0.0679	
38	0.0674	
39	0.0669	
40	0.0665	
41	0.0661	
42	0.0657	
43	0.0653	
44	0.0650	
45	0.0647	
46	0.0644	
47	0.0641	
48	0.0639	
49	0.0637	
50	0.0634	

APPENDIX B

Project Manager Resume

Harley Lukenbill

Objective Water Audit Project Manager

Experience 2000 - 2002 Placer County Water Agency Auburn, CA

Water Efficiency Manager

- Crafted the Updated Urban Water Management Plan
- Representative on the Regional Water Authority Water Efficiency Team
- Created the Agency Meter Maintenance and Test Facility

1998 - 2000 Placer County Water Agency Auburn, CA

Deputy Director Of Customer Service

- Crafted the Water Forum Conservation Plan
- Supervised Meter Services
- Started the Water Audit Program training course for new recruits speeding profitability.

1992 - 1996 Millview Water District Ukiah, CA

General Manager

- Expanded sales team from 50 to 100 representatives.
- Tripled division revenues for each sales associate.
- Expanded sales to include mass market accounts.

Education 1971–1975 Southridge State University Southridge, SC

• B.A., Business Administration and Computer Science.

Graduated Summa Cum Laude.

Interests SR Board of Directors, running, gardening, carpentry, computers.

APPENDIX C

Placer County Water Agency Act

PLACER COUNTY WATER AGENCY ACT

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CHAPTER 81. PLACER COUNTY WATER AGENCY ACT
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  81-2
         Definitions
  81-3
          Body politic and corporate; general powers; exercise of powers.
  81-3.1 Perpetual succession.
  81-3.2 Seal.
  81-33
         Actions
  81-3.4 Eminent domain.
  81-3.5
         Property acquisition; use; disposal.
  81-3.6 Contracts; employment of labor; necessary acts; construction.
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         Availability of water.
 81-4.1 Construction, operation and maintenance of hydroclectric works; sale of
           energy.
  81-4.2 Flood control; water conservation.
 81-4.3 Storage of water; conservation and reclamation; appropriation; actions; prevention of unlawful exportation, contamination or pollution.
 81-4.4 Acquisition of works, waters and water rights; payments in lieu of taxes.
 81-4.5 Operation, maintenance, etc., of works.
 81-4.6 Investigations.
 81-4.7 Conduits along or across streets, railways, ditches, etc.
 81-4.8 Right of way upon public lands.
 81-4.9 Relocation of streets, rallroads, etc., proceedings.
 81-4.10 Reimbursement of county for expenses.
 81-4.11 Contracts for sale of right to use falling water for electric energy purposes.
 81-4.12 Contracts with private water companies for water service.
 81-4.13 Indebtedness.
 81-4.14 Repayment of borrowed money.
 81-4.15 Borrowing with repayment from future revenues.
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 81-5.2 Suspension of delivery of water to delinquent district.
 81-5.3 Renumbered § 81-5.2.
 81-5.4 to 81-5.7 Repealed.
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        United States contract fund.
 61-6.1
 81-6.2 Cooperation with United States, state, municipalities, districts, etc.; con-
           tracts.
        Directors; compensation; chairman; administration of oaths; quorum.
81-7.1 Prohibited interest of directors in contracts; violations; penalties; ex-
          ception.
81-7.2 to 81-7.4 Repealed.
81-8. County officers and employees as officers and employees of agency; perform-
          ance of duties.
$1-8.1 Employment of additional personnel.
       Ordinances, resolutions and other legislative acts; initiative and referen-
$1-9.
          dum.
$1-10. Claims against agency.
81-11. Property.
81-12. Contracts; bids; performance bonds; emergency work; work by force account; materials and supplies.
81-13. Debt limit.
81-13.1 Repealed.
81-14. Taxation.
81-14.1 Ad valorem tax; purposes; limitation.
$1-14.2 Taxation; law applicable.
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\$1-14.3 Renumbered \$1-14.2.

PLACER COUNTY AGENCY ACT

81-15. Establishment of ropes; institution of projects; taxation; bonds. 81-15.1 to 81-15.4 Repealed. 81-16. Revenue bonds. 21-17. Legal investments. 21-18. Action to test validity of bonds, tax levy or contract. 81-19. Effect upon districts within limits of agency. 81-19.1 to 81-19.21 Repealed. 81-20. Vested rights. 81-20.1 to 81-20.8 Repealed. \$1-21. Action to test validity of existence of agency. 21-21.1 Repealed. \$1-22. Dissolution. 81-23. Legislative finding and declaration. 81-24. Partial invalidity. 81-25. Short title. \$1-26 to \$1-29. Repealed. 81-30. Renumbered § 81-18. 81-31. Blank. 81-32. Renumbered § 81-19. 81-33. Renumbered § 81-20. 81-34. Renumbered § 81-21. 81-35. Renumbered \$ 81-22. 81-36. Renumbered \$ 81-23. 81-37. Renumbered § 81-24. 81-38. Renumbered § 81-25.

An act to create the Placer County Water Agency, prescribing its powers and duties, providing for its organization, operation, and management, and authorizing the acquisition of property and works to carry out the purposes of the district, authorizing the incurrence of indebtalaness, providing for issuance of bonds, providing for the levy and collection of taxes for the payment of such indebtalaness, providing for the issuing of bonds payable solely from revenues of the district, providing for the levy and collection of taxes for the payment of general district expenses and for cooperation and contracts with any entity. (Stats.1957, c. 1234, p. 2520.)

§ 81-1. Creation; name; territory

Section 1. A county water agency is hereby created to be known as the Placer County Water Agency. Said agency shall consist of all the territory lying within the exterior boundaries of the County of Placer. Said agency shall be a "local agency" as defined by Section 54307 of the Government Code. (Stats.1957, c. 1234, p. 2520, § 1, as amended Stats.1959, c. 815, p. 2822, § 1.)

Cross References

Boundaries of Placer County, see Government Code | 2313L

Law Review Commentaries

Evolution of forms of water users' organizations in California. Albert T. Henley (1957) 45 CLait 565.

Library References

Waters and Water Courses @224.

C.J.S. Waters | 319.

§ 81-2. Definitions

Sec. 2. As used in this act, the following words shall have the following respective meanings unless the context indicates otherwise:

- (a) "Agency" is the Placer County Water Agency.
- (b) "County" is the County of Placer of the State of California.

- (c) "United States" is the United States of America including any one or more of the bureaus, commissions, divisions, departments, boards, agencies, and officers of the United States of America.
- (d) "State" means the State of California including any one or more of the bureaus, commissions, divisions, departments, boards, agencies, and officers of the State of California.
- (e) "Work" or "works" includes dams and dam sites, reservoirs and reservoir sites, and all conduits and other facilities useful in the control, conservation, diversion and transmission of water; power generation and transmission facilities; any replacement, renovation or improvement of the foregoing; and all land, property, franchises, easements, rights-of-way and privileges necessary or useful to operate or maintain any of the foregoing.
- (f) "District" means any of the following: irrigation districts, county water districts, water conservation districts, water districts, soil conservation districts, municipalities, towns, flood control districts, and any other districts or political subdivisions of the state empowered by law to appropriate water and deliver water to water users.
 - (g) "Public agency" means the United States, the state or any district.
- (h) "Elector" or "qualified elector" or "voter" or "qualified voter" means any elector of the county qualified under the laws of the State of California to vote in the county at general elections.
- (i) "May" is permissive and "shall" is mandatory.
- (i) "Board" means the board of directors of the agency.
- (k) "Agency election" means the election provided for in Section 7.1 held in accordance with the provisions of the Uniform District Election Law.

(Amended by Stats.1974, c. 396, p. 980, § 1.)

\$ 81-3. Body politic and corporate; general powers; exercise of powers

Sec 3. The Placer County Water Agency is hereby declared to be and is a body politic and corporate, and as such shall have, among others, the powers counterated in this act and such other powers as the law may provide. The powers of the agency shall, except as otherwise provided, be exercised by the board of directors thereof. (Stats.1957, c. 1234, p. 2321, § 3.)

Library References

Waters and Water Courses @228.

C.J.S. Waters # 121.

\$ 81-3.1 - Perpetual succession

Sec 3.1. The agency shall have perpetual succession. (Stats.1957, c. 1234, p. 2521, § 3.1.)

Library References

Waters and Water Courses @=227.

C.J.S. Waters 1 320.

\$ 81-3.2 Seal

Sec. 3.2. The agency shall have the power to adopt a seal and alter it at its pleasure. (Stats.1957, c. 1234, p. 2521, § 3.2, as amended Stats.1959, c. 815, p. 2823, § 3.1

§ 81-3.3 Actions

Sec. 2.3. The agency shall have the power to sue and be sued, except as otherwise provided herein or by law, in all actions and proceedings in all courts, commissions, boards and tribunals of competent jurisdiction. (Stats,1957, c. 1234, p. 2521, § 3.3.)

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PLACER COUNTY AGENCY ACT

§ 81-3.4. Eminent domain

Sec. 3.4. The agency shall have the power of eminent domain to acquire within or without the agency any property necessary for carrying out the powers and purposes of the agency, except that the agency shall not have the power to acquire by condemnation publicly owned property held or used for the development, storage or distribution of water for public use.

In lieu of compensation and damages for the taking or damaging of any public utility facility which must be replaced by the public utility to provide service to the public equivalent to that provided by the facility taken or damaged, the agency shall pay to the public utility owning such facility its actual cost incurred to replace in kind the facility so taken or damaged, less proper deductions for depreciation, together with its actual cost incurred to rearrange or rehabilitate the facilities of such public utility not taken or damaged but required to be rearranged or rehabilitated by reason of such taking or damaging.

No action in eminent domain to acquire property or interests therein outside the boundaries of the County of Placer shall be commenced unless the board of supervisors of each affected county has consented to such acquisition by resolution.

(Amended by Stats.1975, c. 581, p. 1168, § 9.)

Law Revision Commission Comment 1975 Amendment

The 'deletal portions of Section 3.4 [Water C.App. § 11-3.4] are superseded by provisions of the Erubent Domain Law. See Code Civ.Proc. §§ 1230.020 (uniform procedure), 1240.610 et seq. (more processary public use), 1240.010 (declaration that a use is a public use is unneces-

mary), 1240.110 (right to take any property or any right or interest is property) 1250.210 (identification of plaintiff). See also Code Civ. Proc. 66 1240.040 and 1245.210 et seq. (resolution of accessity), 1235.170 ("property" defined).

Historical and Statutory Notes

1975 Legislation.

Operative effect of 1975 amendment, ace note under 6 102-7.

Library References

Recommendations relating to condemnation law and proecdure in special districts. 12 Cal.L.Rev.Comm. Reports 1101 (1974).

§ 81-3.5 Property acquisition; use; disposal

Sec. 3.5. The agency shall have the power to take absolutely or on condition, by grant, purchase, gift, devise, or lease, with or without the privilege of purchasing, or otherwise, real and personal property of any kind, or any interest in real or personal property, within or without the agency, necessary to the full exercise of its powers, and to hold, use, enjoy, and to lease or dispose of the same subject to the limitations set forth in Section 11. (Stats.1957, c. 1234, p. 2522, § 3.5.)

Library References

Waters and Water Courses @215%.

C.J.S. Waters 1 321.

\$ 81-3.5 Contracts; employment of labor; necessary acts; construction

Sec. 3.6. The agency shall have the power to make contracts, employ labor and to do all acts necessary for the full exercise of its purposes and powers. The board may cause construction or other work to be performed or carried out by contracts or by the agency under its own superintendence. (Stats.1957, c. 1234, p. 2522, \$ 3.G.)

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Waters and Water Courses 5 22814.

C.J.S. Waters 1 121.

§ 81-4. Availability of water

Sec. 4. The agency shall have the power as limited in this act to do any and every lawful act necessary in order that sufficient water may be available for any present or future beneficial use or uses of the lands or inhabitants within the agency, including, but not limited to, irrigation, domestic, fire protection, municipal, commercial, industrial, recreational, and all other beneficial uses and purposes. (Stats1957, c. 1234, p. 2522, § 4.)

Library References

Cross References

Appropriation of water, see Water Code \$ 1200 et seq. Beneficial use of water, see Const. art. 14, § 3; Water Code \$\$ 100, 101, 1240.

§ 81-4.1. Construction, operation and maintenance of hydroelectric works; sale of energy; facilities for generation transmission, distribution, sale and lease of electric power

Sec. 4.1. The agency shall have the power to construct, operate, and maintain works to develop hydroelectric energy as a means of assisting in financing the construction, operation, and maintenance of its projects for the control, conservation, diversion, and transmission of water and to enter into contracts for the sale of that energy for a term not to exceed 50 years. The energy may be marketed to any public agency, private entity, person, or the federal or state government. The agency shall also have the power to acquire, operate, lease, and control facilities for the generation, transmission, distribution, sale, and lease of electric power, including sale to municipalities, public utility districts, or persons, all in the same manner as irrigation districts formed under the Irrigation District Law (Division 11 (commenting at Section 20500) of the Water Code).

The powers granted by this section shall not include, and nothing in this act shall be construed to allow, the acquisition of property or facilities already employed in the generation of hydroelectric energy, except by mutual agreement between the agency and the owner and operator of the property or facilities.

The powers granted by this section shall not include, and nothing in this act shall be construed to allow, the retail sale of hydroelectric energy by the agency of any power generated by the Middle Fork Project during the term of the current contract for the sale of the hydroelectric energy from that project.

(Amended by Stats. 1982, c. 252, p. 824, § 1.) Sec GC 22115

1 81-42 Flood control; water conservation

Sec. 4.2. The agency shall have the power to control the flood and storm waters of the agency and the flood and storm waters of streams that have their sources outside of the agency, which streams and floodwaters flow into the agency, and to conserve such waters for beneficial and useful purposes of said agency by spreading, storing, retaining and causing to percointe into the soil within or without said agency, or to save or conserve in any manner all or any of such waters and protect from damage from such flood or atorm waters the watercourses, watersheds, public highways, life and property in said agency, and the watercourses outside of the agency of streams flowing into the agency. (Stats.1937, c. 1234, p. 2022, § 42.)

Cross References

Beneficial use of water, see Const. art. 14, § 3; Water Code 55 100, 101, 1240.

Library References

Levees and Flood Control @5-7.

C.J.S. Levees and Picod Control § 13.

§ 81-4.3 Storage of water; conservation and reclamation; appropriation; actions; prevention of unlawful exportation; contamination or pollution

Sec. 4.3. The agency shall have the power to store water in surface or underground reservoirs within or outside of the agency for the common benefit of the agency; to conserve and reclaim water for present and future use within the agency; to appropriate and acquire water and water rights, and import water

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PLACER COUNTY AGENCY ACT

into the agency and to conserve and utilize, within or outside of the agency, water for any purpose useful to the agency; to commence, maintain, intervene in, defend or compromise, in the name of the agency in behalf of the landowners therein, or otherwise, and to assume the costs and expenses of any action or proceeding involving or affecting the ownership or use of waters or water rights, within or without the agency, used or useful for any purpose of the agency or of common benefit to any land situated therein, or involving the wasteful use of water therein; to commence, maintain, intervene in, defend and compromise and to assume the cost and expenses of any and all actions and proceedings now or bereafter begun; to prevent interference with or diminution of, or to declare rights in the natural flow of any stream or surface or subterranean supply of waters used or useful for any purpose of the agency or of common benefit to the lands within the agency or to its inhabitants; to prevent unlawful exportation of water from said agency; to prevent contamination, pollution or otherwise rendering unfit for beneficial use the surface or subsurface water used in said agency, and to commence, maintain and defend actions and proceedings to prevent any such interference with such waters as may endanger or damage the inhabitants, lands, or use of water in, or flowing into, the agency; except that the agency shall have no power to intervene or take part in, or to pay the costs or expenses of, actions or controversies between the owners of lands or water rights which do not affect the interests of the agency. (Stats. 1957, c. 1284, p. 2522, § 4.3.)

Cross References

Appropriation of water, see Water Code 1 1200 et seq.

Library References

Waters and Water Courses (>10, 132, C.J.S. Waters \$\$ 172, 232, 253, 196, 256,

5 81-4.4 Acquisition of works, waters and water rights; payments to lieu of taxes

Sec. 4.4. The agency shall have the power within or outside the agency to construct, purchase, lease, or otherwise acquire works, to purchase, lease, appropriate or otherwise acquire water and water rights, useful or necessary to make use of water for any purposes authorized by this act, and to make payments in lieu of faxes to any or all political subdivisions, including but not limited to school districts, upon works acquired by the agency situate within such political subdivisions. (Stats. 1957, c. 1234, p. 2523, § 4.4, as amended Stats. 1967, c. 117, p. —, § 1, urgency, cfl. May 9, 1967.)

Library References

Waters and Water Courses @2150.

C.J.S. Waters | 228.

\$ 81-4.5 Operation, maintenance, etc., of works

Sec. 4.5. The agency shall have the power to operate, repair, improve, maintain, ronew, replace and extend all works and property of the agency. (Stats.1957, c. 1234, p. 2923, § 4.5.)

Library References

Waters and Water Courses @244.

C.J.S. Waters 1 350.

\$ 81-4.6 Investigations

Sec. 4.6. The agency shall have the power to carry on technical and other necessary investigations, make measurements, collect data, make analyses, studies, and inspections pertaining to water supply, water rights, control of flood and storm waters, and use of water both within and without said agency relating to water-courses or streams flowing in or into said agency. (Stats 1957, c. 1231, p. 2523, § 4.6.)

72A Cal.Code-2

Library References

Administrative Law and Procedure C.J.S. Public Administrative Bodies and Procedure ‡ 73.

§ 81-4.7 Conduits along or across streets, rallways, ditches, etc.

Sec 4.7. The agency shall have the power to construct its pipes, pipelines, fumes and tunnels and other conduits, including facilities for the transmission of electric energy to the works of the agency, along, under or across any public road, street, alley, avenue, highway or sidewalk, or across any stream of water, water-course, railway, canal, ditch, or flume which the route of said pipes, pipelines, canals, flumes, tunnels, or other conduits may intersect or cross, except that such works shall be constructed in such manner as to afford security for life and property and the agency shall restore at its own expense any such crossings and intersections to their former state as nearly as may be, or to an extent which does not unnecessarily impair their usefulness. Every company, municipality, or district whose right of way shall be intersected or crossed by said pipes, pipelines, canals, flumes, tunnels or other conduits shall unite with the agency in forming said intersections and crossings and grant the rights therefor. (Stats.1957, c. 1234, p. 2523, § 4.7.)

Cross References

Rights of way, see Civil Code § 801 et seq.

Library References

Waters and Water Courses @242. C.J.S. Waters § 340. Sovereign Immunity study. Cal Law Revision Comm. (1963) Vol. 5, p. 93.

§ 81-4.8 Right of way upon public lands

Sec. 4.8. There is hereby granted to the agency the right of way for the location, construction, and maintenance of works authorized under the provisions of this act in, over and across public lands of the State of California, not otherwise disposed of or in use, but not in any case exceeding an area which is necessary for the construction of such works and adjuncts or for the protection thereof. Whenever any selection of a right of way for such works or adjuncts thereto is made by the agency, the board shall transmit to the State Lands Commission, the Controller of the State and the recorder of the county in which the selected lands are situated, a plat of the lands selected, giving the extent thereof and the uses for which the same is claimed or desired, verified by the board. If the State Lands Commission approves the selections so made it shall endorse its approval upon the plat and issue to the agency a permit to use such right of way and lands. (Stats. 1957, c. 1234, p. 2524, § 4.8.)

Cross References

Rights of way, see Civil Code ; 501 et seq.

§ 81-4.9 Relocation of streets, railroads, etc.; proceedings

§ 81-4.9. Repealed by Stats.1975, c. 585, p. 1242, § 17

Law Revision Commission Comment 1975 Repeal

Section 4.9 [Water C.App. § 81-4.9] is superseded by Section 1240.330 of the Code of Civil Procedure and Section 861 of the Public Utilities Code.

Historical and Statutory Notes

Library References

-/-

Operative effect of 1975 repealer, see note under § 40-39.

Recommendations relating to condemnation law and procedure in special districts. 12 Cal.L.Rev.Comm. Reports 1101 (1974).

\$ 81-4.10 Reimbursement of county for expenses

Sec. 4.10. The agency may reimburse the county for any funds expended by the county in investigations, elections, or other acts incidental to the establishment of the agency. (Stats.1957, c. 1234, p. 2524, § 4.10.)

Library References

Waters and Water Courses @=231.

C.J.S. Waters 5 337.

§ 81-4.11 Contracts for sale of right to use falling water for electric energy purposes

Sec. 4.11. In connection with the construction and operation of the works of the agency, the agency shall have the power to contract for the sale of the right to use falling water for electric energy purposes with any public agency or private entity engaged in the retail distribution of electric energy, for a term not to exceed 50 years. (Stats.1957, c. 1234, p. 2525, § 4.11, as amended Stats.1959, c. 815, p. 2824, § 6.)

Library References

Waters and Water Courses @= 2281/4.

C.J.S. Waters # 321.

§ 81-4.12 Contracts with private water companies for water service

Sec. 4.12. The agency shall have power to enter into contracts with any private water company formed and existing exclusively to provide water service within the agency whenever such contract appears to the board to be in the public interest. (Added Stats.1959, c. 815, p. 2824, § 7.)

Library References

Waters and Water Courses @=2251/4.

C.J.S. Waters | 321.

§ 81-4.13 Indebtedness

Sec. 4.13. The agency shall have power to borrow money, incur indebtedness and issue bonds or other evidence of such indebtedness in the manner provided herein. (Added Stats.1959, c. 815, p. 2824, § 8.)

§ 81-4.14 Repayment of borrowed money

Sec. 4.14. When authorized by the board the agency shall have the power to borrow money with repayment to commence at a future date from revenues of the agency. (Added Stats.1959, c. 815, p. 2824, § 8.5.)

\$ 81-4.15 Borrowing with repayment from future revenues

Sec. 4.15. Notwithstanding the provisions of Section 13 of this act and in addition to the other powers provided in this act, the agency by agreement authorized by resolution of the board may incur an indebtedness for the agency or for any zone or participating zones designated in such resolution for acquisition or construction of any works or property, including water or water rights, for any purposes of the agency, to be repaid and liquidated as to both principal and interest only from revenues designated in such agreement which are produced from the collection of rates, tolls or charges for any water or services or facilities furnished, sold or leased by the agency, provided the proposal to incur such indebtedness is first approved at an election at which there is submitted to the qualified voters of the agency, if the indebtedness is to be incurred for the agency, or to the qualified voters of the zone or participating zones, if the indebtedness is to be incurred for a zone or participating zones, the proposition whether such indebtedness shall be incurred. Such election shall be held as nearly as practicable in accordance with the procodures set forth in Section 15 of this act except that the incurring of such indebtedness shall be approved if a majority or more of the votes cast on such proposition are in favor thereof. In the agreement incurring said indebtedness, the agency may pledge to the payment of the amounts to become due thereunder all or any part of the revenue from which such amounts are payable. In connection with such pledge the agreement may contain such covenants, promises, restrictions and provisions as the agency may deem necessary or desirable, including, but not limited to, covenants, promises, restrictions and provisions relating to (a) the operation, maintenance and preservation of the works or property so acquired or constructed, (b) the rates, tolls or charges from which said indebtedness is to be repaid, (c) the incurring of additional indebtedness payable from the revenue pledged, and (d) the establish-

PLACER COUNTY WATER AGENCY ACT ment, maintenance and use of reserve funds, maintenance and operation funds, funds for the payment of amounts due under the agreement and other funds for the security of the one to whom the indebtedness is owed. (Added Stats.1965, c. 854, p. 2452, § 1, urgency, eff. July 6, 1965, as amended Stats.1967, c. 117, p. —, § 2, urgency, eff. May 9, 1967.)

Library References

Waters and Water Courses @=230(1) C.J.S. Waters 1 323.

§ 81-5. Powers of agency

Sec. 5. The agency shall have the power:

(a) To sell, lease or otherwise dispose of water or any rights to the use of the works of the agency; provided, however, that no such sale, lease or disposal shall be made for use outside the agency unless the board determines that the water or works involved will not be needed for use within the agency.

(b) To fix, revise, and collect rates and charges for the services, facilities, or water

furnished by it.

(c) To establish rules and regulations to protect the public health in the operation of the works, to provide for the sale, distribution and use of water and the services and facilities of the works, to provide that service, facilities, or water shall not be furnished to persons against whom there are delinquent charges, and to provide for charges for the restoration of service.

(d) To provide that charges for any of its services or facilities may be collected together with and not separately from the charges for other services or facilities rendered by it, or it may contract that all such charges be collected by any other district or private or public utility, and that such charges be billed upon the same

bill and collected as one item.

(e) To provide that if all or part of a bill is not paid, the agency may discontinue

any or all services or facilities for which the bill is rendered.

(f) To provide for the collection of charges. Remedies for their collection and enforcement are cumulative and may be pursued alternatively or consecutively as the agency determines.

(g) To provide for a basic penalty of not more than 6 percent for nonpayment of the charges within the time and in the manner prescribed by it, and in addition to provide for a penalty of not exceeding one-half of 1 percent per month for nonpay-

ment of the charges and basic penalty. The agency may provide for the collection of such penaltics. (Stats.1957, c. 1234, p. 2525, § 5, as amended Stats.1959, c. S15, p. 2824, § 9; Stats.1965, c. 972, p. 2589, § 1.)

Library References

Waters and Water Courses @=257(1, 2). C.J.S. Waters 1 363.

§ 81-5.1 Contracts with districts; purposes

Sec. 5.1. The agency may enter into contracts with any district for any of the following purposes:

(a) The lease, purchase, or other acquisition by the agency of any of the works

of such district.

(b) The construction of works by the agency for the conservation, regulation or transmission of water for the benefit of such district or the furnishing or sale by the agency to such district or by such district to the agency of water or a water supply for any purpose.

(c) The sale, lease, or other disposition of water, a water supply, water rights, or water storage facilities or any interests in any thereof for any purpose by the agency

to any district or by any district to the agency.

(d) The operation of works and the delivery of water by the agency to any dis-

trict or by any district to the agency.

Such contracts shall be executed in accordance with the laws governing such districts. (Stats.1957, c. 1234, p. 2525, § 5.1, as amended Stats.1959, c. 815, p. 2824, § 10.)

Library References

Waters and Water Courses Cm254.

C.J.S. Waters 1 261.

§ 81-5.2 Suspension of delivery of water to delinquent district

Sec. 5.2. The agency in its discretion may suspend delivery of water conserved by the agency or obtained by or on behalf of the agency to any district during the period in which said district is delinquent in its payment for or obligations due in respect to such water under any contract entered into by it with the agency. (Formerly § 81-5.3, Stats.1957, c. 1234, p. 2526, § 5.3. Renumbered § 81-5.2, and amended Stats. 1959, c. 815, p. 2825, § 11.)

§ 81-5.3 Renumbered § 81-5.2 and amended. Stats. 1959, c. 815, p. 2825, § 11

§ 81-5.3. Standby or availability charge

Sec. 5.3. The agency may fix a water service standby or immediate availability charge to be applied on an area, or frontage, or parcel basis, or a combination thereof, to such areas within the agency to which water service is made available for any purpose by the agency, whether the water service is actually used or not, provided, that such charge may not be levied against unimproved property permanently dedicated to public transportation. The agency may establish schedules varying such charge according to the land uses and the degree of availability or quantity of use of such water service to the affected lands, and may restrict such charge to lands lying within one or more zones or areas of benefits established within such agency. The agency may not, however, fix a charge in excess of ten dollars (\$10) per acre per year or in excess of five dollars (\$5) per year for a parcel of less than one acre.

The agency may collect the standby or availability charge by billing the charged lands on a fiscal year basis or by other means available.

The agency may collect the standby or availability charge as a part of the annual general county tax bill provided the agency furnishes in writing to the board of supervisors and to the county auditor the description of each parcel for which a charge is to be billed together with the amount of the charge applicable to each parcel in sufficient time to meet the schedule established by the county for inclusion of such items on the county general tax bill. The parcel description may be the parcel number assigned by the county assessor to the parcel. In such cases, the standby or availability charge shall become a lien against the parcel of land to which it is charged in the same manner as the county general taxes. Penalties may be collected for late payment of the standby or availability charge or the amount thereof unpaid in the manner and at the same rates as that applicable for late payment or the amount thereof unpaid of county general taxes.

If the agency collects standby charges through the county general tax bill, the amount of the standby charge and any applicable penalty shall be stated on the tax bill separately from all other taxes, if practicable.

(Added by Stats.1971, c. 120, p. 163, § 1, eff. June 4, 1971.)

Library References

Waters and Water Courses ←183½.

C.J.S. Waters § 243.

Sec GC 54984.1 For Uniform Stundby Charp Trocedures Act

§§ 81-5.4 to 81-5.7 Repealed. Stats.1959, c. 815, p. 2834, 5 29

Historical Note

The repealed sections, derived from Stats.1957, c. 1234, p. 2526, §§ 5.4-5.7, related to rights and liabilities of member units.

PLACER COUNTY AGENCY ACT

§ 81-6. Cooperation with United States; reclamation

Sec 6. The agency shall have the power to cooperate and contract with the United States under the Federal Reclamation Act of June 17, 1902,1 and all nots amendatory thereof and supplementary thereto or any other act of Congress here-tofore or hereafter enacted permitting cooperation or contract for the purposes of construction of works, whether for irrigation, drainage, or flood control, or for the acquisition, purchase, extension, operation and maintenance of such works, or for a water supply for any purposes, or for the assumption as principal or guarantor of indebtedness to the United States, or for carrying out any of the purposes of the agency, and for said purposes the agency shall have, in addition to the powers set forth in this act, all powers, rights and privileges possessed by irrigation districts as set out in Chapter 2 of Pact 6 of Division 11 of the Water Code, 2 not inconsistent with the provisions of this act. (Stats. 1957, c. 1234, p. 2527, § 6.)

1 43 U.S.C.A. § 373 et seq.

2 Water Code # 23175.

Library References

Waters and Water Courses @= 222.

C.J.S. Waters | 316.

§ 81-6.1. United States contract fund

Sec. 6.1. All money collected in pursuance of a contract with the United States shall be paid into the agency treasury to the credit of the agency and shall be held in a fund to be known as the "United States Contract Fund" to be used for payments due to the United States under the contract. (Amended by Stats. 1969, c. 358, p. 874, § 1, eff. July 3, 1969.)

§ 81-6.2 Cooperation with United States, state, municipalities, districts, etc.; contracts

Sec. 6.2. The agency may cooperate and act in conjunction and contract with the United States, State of California, any municipality, district, public or private corporation, or any person; in the purchase and sale of water, in the acquisition of water or a water supply, in the construction of any works for the controlling of flood or storm waters in the agency, or for the protection of property, watersheds, watercourses, highways and life, or for the purpose of conserving and transporting said waters for beneficial uses and purposes, including recreational uses and the generation of electric energy, and for the use, operation and management and ownership of such works. The agency also may make and perform any agreement with the United States, the State, any county, municipality, district, public or private corporation, or any person for the joint acquisition, disposition, operation or management of any property, works, water or water supply of a kind which might be acquired, disposed of, or operated by the agency.

Any irrigation district, California water district, public utility district, municipal

Any Irrigation district, California water district, public utility district, municipal utility district, soil conservation district, county water district, water conservation district, municipality, flood control district, and any other district or political subdivision of the State empowered by law to appropriate water and deliver water to users may:

(a) Cooperate, act in conjunction with and enter into contracts with the agency for all the purposes for which the agency is empowered to cooperate or act in conjunction and contract with such districts, municipalities, and political subdivisions.
(b) Carry out the terms of such contracts. (Stats.1957, c. 1234, p. 2528, § 6.2.)

Library References

Library References

Waters and Water Courses @227.

C.J.S. Waters \$ 320.

§ 81-7. Directors; compensation; appointment

- Sec. 7. (a) The board of supervisors of the county shall be ex officio the board of directors of the agency until succeeded by an appointed board as provided for in this section. Each member of the board of supervisors shall serve as a member of said board of directors without additional compensation, except such member shall be allowed his actual, necessary and reasonable traveling expenses.
- (b) On or before January 15, 1975, the board of supervisors of the county shall by resolution do both of the following:
- (1) Appoint a board of five directors for the agency, each of whom shall be a voter from a different supervisorial district in the county.
- (2) Fix the time and date upon which the newly appointed directors shall take office, which time and date shall not be later than twelve o'clock noon, February 1, 1975. After such time and date the board of supervisors shall cease to be ex officio the board of directors of the agency.

(Amended by Stats.1969, c. 358, p. 874, § 1.5, eff. July 3, 1969; Stats.1970, c. 56, p. 72, § 1; Stats.1974, c. 396, p. 980, § 2.)

Cross References

Public officers and employees, interest in contracts, see Government Code 1 1090 et seq.

Library References

Officers \$3110.

C.J.S. Officers § 116.

§ 81-7.1. Directors; qualifications; tenure; vacancies

Sec. 7.1. Except for the directors first appointed pursuant to Section 7, the governing body of the agency shall be a board of five directors, each of whom shall be a voter of, and nominated and elected from, a supervisorial district of the county.

The directors first appointed from supervisorial districts 3, 4, and 5 shall hold office until their successors take office following their election at the agency election held in 1975, and the directors first appointed from supervisorial districts 1 and 2 shall hold office until their successors take office following their election at the next succeeding agency election, which shall be in 1977.

Excepting directors appointed, each director shall be elected at an agency election and shall serve a term of four years. The provisions of the Uniform District Election Law shall govern all agency elections for directors.

All vacancies occurring in the office of director, including the failure of a person elected to qualify, shall be filled within 30 days after the vacancy occurs by appointment by the remaining directors of a person who is eligible to be elected for the vacancy. If the remaining directors fail to fill any

vacancy within such 30-day period, the vacancy shall be filled by appointment by the board of supervisors of a person who is eligible to be elected for the vacancy.

(Added by Stats.1974, c. 396, p. 981, § 3.)

Historical and Statutory Notes

1970 Legislation.

Former section \$1-7.1 was repealed by Stats.1970, c. 447, p. 896, § 38.

§ 81-7.2. Directors; chairman; meetings; procedure

Sec. 7.2. Within 30 days after the directors first appointed pursuant to Section 7 take office, and thereafter within 30 days after those who are elected at the succeeding elections take office, the directors shall meet and organize as a board.

The board shall:

- (a) Elect from its members a chairman, who shall preside at all meetings of the board, and in case of the chairman's absence or inability to act, the members present shall, by an order entered in their records, select one of their number to act as temporary chairman.
 - (b) Provide for the time and place of holding its regular meeting.
- (c) Provide for the manner of calling special meetings. The board shall act only by ordinance, resolution or motion and the enacting clause of all ordinances passed by the board shall be:

"Be it ordained by the Board of Directors of the Placer County Water Agency as follows:"

All ordinances shall be signed by the chairman and attested by the secretary or clerk, and shall be adopted, recorded, and published in the same manner, except as herein otherwise expressly provided, as are ordinances of the county. A majority of the board shall constitute a quorum for the transaction of business, and no act of the board shall be valid and binding unless a majority of all members concur therein. The board may transact any business of the agency at its organization meeting.

The board shall establish rules for its proceedings, and all legislative sessions of the board shall be

(Added by Stats.1974, c. 396, p. 981, § 4.)

§ 81-7.3. Electrical energy; contracts for sale; expenditures; public hearings

Sec. 7.3. No contract for the sale of electrical energy shall be executed, nor shall any revenues received pursuant to any contract for the sale of electrical energy entered into after January 1, 1975, be spent, unless previously approved by the board of supervisors of the county. The board of supervisors may, in connection with any of the foregoing conduct public hearings. Such hearings shall be declared by a resolution specifying the purpose and the day, hour, and place where all interested persons may appear and be heard. Such resolution shall be published in the agency pursuant to Section 6063 of the Government Code in a newspaper of general circulation in the agency. The hearing may be adjourned from time to time at the discretion of the board of supervisors, and at its conclusion the board of supervisors shall declare its decision.

(Added by Stats.1974, c. 396, p. 982, § 5.)

§ 81-7.4. Directors; compensation; expenses

Sec. 7.4. Each member of the board of directors shall be entitled to receive from the agency such compensation for performing the duties of director as may be fixed from time to time by the board; provided, that such compensation shall not exceed the maximum compensation permitted by law for directors of irrigation districts. In addition thereto, directors may be paid their actual and necessary expenses when acting under the orders of the board.

(Added by Stats.1974, c. 396, p. 982, § 6.)

§ 81-8. County officers and employees as officers and employees of agency; performance of duties

Sec. 8. All officers of the county, and their assistants, deputies, clerks and employees, shall be ex officio officers, assistants, deputies, clerks and employees respectively of the agency, and shall perform, unless otherwise provided by the board, the same duties for the agency as performed for the county; except that if the county surveyor is a registered civil engineer and is employed to supervise the engineering work of the agency, the board may provide compensation for his services in addition to his salary as county surveyor which shall be payable from the funds of the agency. (Stats 1957, c. 1234, p. 2529, § 8.)

§ 81-8.1. Employment of additional personnel

Sec. 8.1. The board may appoint and employ a secretary and such other officers, agents, superintendents, engineers, attorneys and employees for the board or agency as in its judgment may be deemed necessary, including, if it deems it advisable, a clerk, superintendent of work, treasurer, and auditor, and define their powers and duties, fix their compensation and fix the amount of bond required of each such employee or officer and pay the premium of each such bond. Such officers, agents and employees so appointed shall hold their respective offices and positions during the pleasure of the board. The board shall have the power to combine any two or more offices in its discretion.

(Amended by Stats.1969, c. 358, p. 874, § 2, eff. July 3, 1969; Stats.1974, c. 630, p. 1479, § 1.)

\$ 81-9. Ordinances, resolutions and other legislative acts; initiative and ref-

Sec. 9. All ordinances, resolutions and other legislative acts of the agency shall be adopted by the board, and certified to, recorded and published in the same manner, except as berein otherwise expressly provided, as are ordinances, resolutions or other legislative acts of the county.

The initiative and referendum powers are bereby granted to the electors of the agency to be exercised in relation to the enactment or rejection of agency ordinances in accordance with the procedure established by the laws of this State for the exercise of such powers in relation to counties. (Stats.1957, c. 1234, p. 2530, § 9.)

County ordinances, see Government Code § 25120 et seq. Initiative and referendum, see Elections Code § 3700 et seq.

Library References

Administrative Law and Procedure €=121-124, C.J.S. Public Administrative Bodies and Procedure § 19.

\$ 81-10. Claims against agency

Sec. 10. Claims for money or damages against the agency are governed by Part 3 (commencing with Section 900) and Part 4 (commencing with Section 940) of Division 3.6 of Title 1 of the Government Code, except as provided therein. Claims not governed thereby or by other statutes or by ordinances or regulations authorized by law and expressly applicable to such claims shall be prepared and presented to the governing body, and all claims shall be audited and paid in the same manner and with the same effect as are similar claims against the county. (Stats 1957, c. 1234, p. 2530, § 10, as amended Stats. 1959, c. 815, p. 2825, § 13; Stats. 1964, 1st Ex. Sess., c. 123, p. 387, § 1, urgency, eff. May 28, 1904.)

Historical Note

Section 2 of Stats. 1964, 1st Ex. Sess., c. 123, p. 388, provided:

"(a) This act applies to all causes of action heretofore or hereafter accruing.

"(b) Nothing in this act revives or reinstates any cause of action that, on the effective date of this act. is barred either by failure to comply with any applicable statute, charter or ordinance requiring the presentation of a claim or by failure to commence an action thereon within the period prescribed by an applicable statute of limitations.

"(c) Subject to subdivision (b), where a cause of action accrued prior to the effective date of this act and a claim thereon has not been presented prior to the effective

date of this act, a claim shall be presented in compliance with this act, and for the purposes of this act such cause of action shall be deemed to have accrued on the effective date of this act.

"(d) Subject to subdivision (b), where a cause of action accrued prior to the effective date of this act and a claim thereon was presented prior to the effective date of this act and a claim thereon was presented prior to the effective date of this act, the provisions of this act so far as applicable shall apply to such claim; and, if such claim has not been acted upon by the board prior to the effective date of this act, such claim shall be deemed to have been presented on the effective date of this act."

Cross References

Claims against counties, see Government Code # 29700 et seq.

Library References

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PLACER COUNTY AGENCY ACT

§ 81-11. Property

Sec. 11. The legal title to all property acquired under the provisions of this act shall be in the agency and shall be held for the uses and purposes of this act. The board may hold, use, acquire, manage, occupy and possess such property and, after declaring by resolution entered in the minutes that any real or personal property held by the agency is no longer necessary, may sell or otherwise dispose of such property, or lease the same, in the manner provided by law for the disposition and sale of property by counties. (Stats.1957, c. 1234, p. 2530, § 11.)

Cross References

Sale of county property, see Government Code \$1 23004, 25354 et seq.

Library References

Waters and Water Courses @m228%.

C.J.S. Waters 1 221.

\$ 81-12. Contracts; bids; performance bonds; emergency work; work by force account; materials and supplies * (see footnote below)

§ 81-12. Repealed by Stats.1984, c. 1128, § 141

Historical and Statutory Notes
Prior to repeal, § 81-12 was amended by Stats.1969, c. 358, p. 875, § 3.

Sec. now, Pub. Con. C. § 21321.

§ 81-13. Debt limit

Sec. 13. The agency shall not incur any indebtedness or liability exceeding in any year the income and revenue provided for such year, and any indebtedness or liability incurred in violation of this section shall be absolutely void and unenforceable. This section shall have no application to debts or liabilities incurred pursuant to the provisions of this act authorizing the issuance of revenue bonds pursuant to Section 16, the levying of special assessments, the execution of contracts with the United States and the state, nor the incurring of any indebtedness or liability authorized by a vote of the electors of any zone or improvement district of the agency at an election held for such purpose. (Amended by Stats 1971, c. 120, p. 164, § 1.5, eff. June 4, 1971.)

§ 81-13.1 Repealed. Stats.1959, c. 815, p. 2834, § 29

Historical Note

The repealed section, derived from Stats.1957, c. 1234, p. 2531, § 13.1, related to bond-ed debt limit.

Cross References

Local spending and taxing limits, see Const. art. 11, § 20.

§ 81-14. Taxation

Sec. 14. The agency may levy taxes to accomplish the purposes of this act, but only to the extent specifically authorized by this act. (Stats.1957, c. 1234, p. 2531, § 14, as amended Stats.1959, c. 815, p. 2826, § 15.)

Library References

Waters and Water Courses @231.

C.J.S. Waters | 333.

-15-

Former §81-12 has been replaced by Pub. Contract Code § 21321. Text of Art. 97 of Pub. Contract Code containing § 21321 is attached at the end of PCWA Act.

§ 81-14.1 Ad valorem tax; purposes; limitation

Sec. 14.1. If from any cause, the revenues of the agency shall be, or in the judgment of the board are likely to be, inadequate for any lawful purpose of the agency, the board shall have the power in any year to levy an ad valorem tax upon all taxable property in the agency for such purposes, except that the aggregate taxes or assessments levied for any one fiscal year shall not exceed ten cents (\$0.10) on each one hundred dollars (\$100) of the assessed valuation of the taxable property in the agency exclusive of any tax levied in any zone or participating zone pursuant to Section 15.

Such taxes shall be levied and collected with and not separately from taxes for county purposes, and the revenue derived from said agency taxes shall be paid into the county treasury to the credit of the agency, and the board shall have the power to control and order the expenditure thereof for said lawful purposes of the agency. (Stats.1957, c. 1234, p. 2531, § 14.1, as amended Stats.1959, c. S15, p. 2826, § 16.)

Cross References

Collection of county taxes, see Revenue and Taxation Code § 2501 et seq.
Levy of county taxes, see Government Code § 25100 et seq.; Revenue and Taxation Code § 2510 et seq.

§ 81-14.2 Taxation; law applicable

Sec. 14.2. The provisions of law of this State, prescribing the priority, time, and manner of levying, assessing, equalizing and collecting county property taxes, including the sale of property for delinquency, and the redemption from such sale, and the duties of the several county officers with respect thereto, are bereby adopted for the agency and made a part hereof, so far as they are applicable and not in conflict with this act. Such officers shall be liable upon their official bond for the faithful discharge of the duties imposed upon them by this act. (Formerly § 81-14.3, Stats.1957, c. 1234, p. 2532, § 14.3. Renumbered § 81-14.2, and amended Stats.1959, c. 815, p. 2826, § 17.)

Historical Note

Former section \$1-14.2, derived from to levy of special ad valorem tax, was re-Stats.1957, c. 1234, p. 2532, § 14.2, relating pealed by Stats.1959, c. \$15, p. 2834, § 29.

Cross References

County property taxes,
Assessment, see Revenue and Taxation Code § 201 et seq.
Collection, see Revenue and Taxation Code § 2501 et seq.
Equalization, see Revenue and Taxation Code § 1501 et seq.
Isvy, see Government Code § 25100 et seq.; Revenue and Taxation Code § 2151 et seq.
Redemption, see Revenue and Taxation Code § 4010 et seq.
Sale of property for delinquency, see Revenue and Taxation Code § 3351 et seq.

\$ 81-14.3 Renumbered § 81-14.2 and amended. Stats.1959, c. 815, p. 2826, § 17

§ 81-14.3. Collection of taxes; net amount paid to agency

Sec. 14.3. The taxes levied pursuant to Section 14.1 shall be collected at the time and in the manner of county taxes and paid into the county treasury. The net amount of the taxes, after deduction of the county's compensation for the services of its treasurer, assessor and tax collector, shall be paid to the agency treasurer by warrant of the county auditor.

(Added by Stats 1969, c. 358, p. 876, § 4, eff. July 3, 1969.)

§ 81-14.4. Revolving fund; creation; bond; expenditures and reimbursement

Sec. 14.4. (a) The board may establish a revolving fund for the use of any officer or employee of the agency by adopting a resolution setting forth the necessity for the fund, the officer or employee for which the fund is available, and the amount of the fund. Certified copies of the resolution shall be transmitted to the agency auditor and agency treasurer.

- (b) Before any money is withdrawn from the agency treasury to be placed in the revolving fund, the officer or employee for whose use the fund is created shall file with the secretary of the board a bond executed by himself as principal and by an admitted surety insurer, in an amount equal to that of the revolving fund. The bond shall be conditioned upon the faithful administration of the fund and upon the willingness and ability of the principal to account for and pay over the fund upon demand of the board at any time.
- (c) Upon the filing of the required bond the agency auditor shall draw his warrant in favor of the officer or employee for whose benefit the revolving fund is created, and the agency treasurer shall pay the warrant.
- (d) The officer or employee may be authorized to use the fund for making change when necessary in carrying on his official work.
- (e) The officer or employee shall not be authorized to expend any portion of the revolving fund except for services or material which are a legal charge against the agency.
- (f) Any expenditure in excess of one dollar (\$1) shall not be made unless a receipt is obtained which sets forth the date, the purpose of the expenditure, and the amount expended.
- (g) Demand shall be made upon the agency for reimbursement of the fund in the same manner that other demands are made and shall be supported by receipts. All sums received in satisfaction of the demand shall be returned to the revolving fund.
- (h) Upon demand of the agency auditor or board, the officer or employee entrusted with the fund shall give an account of the fund.
- (i) The board may at any time increase, reduce, or discontinue any revolving fund established by its order. If the revolving fund is ordered reduced, the officer or employee using it shall immediately return to the agency treasurer the amount necessary to reduce the fund as ordered by the board. If the fund is discontinued the officer or employee shall immediately refund it to the agency treasurer. A reasonable time shall be allowed the officer or employee to reimburse himself by demand on the agency for expenditures legally made from the fund.

(Added by Stats.1969, c. 358, p. 876, § 5, eff. July 3, 1969.)

§ 81-15. Establishment of zones; institution of projects; taxation; bonds

- Sec. 15. (a) Establishment of zones. The board by resolution shall establish such zones within the agency as in the judgment of said board are necessary to equitably apportion the benefits of the agency to the lands within the respective zones. Such zones may be established within the agency without reference to the boundaries of other zones, by setting forth the descriptions thereof by metes and bounds and by entitling each of such zones by a zone number. The lands comprising a zone need not be contiguous. All zones shall be established only with respect to projects for the benefit of such zones and proceedings for the establishment of such zones may be conducted concurrently with and as a part of proceedings for the instituting of projects relating to such zones, which proceedings shall be instituted in the manner prescribed in this section.
- (b) Institution of projects; resolution; notice; hearing. The board may institute projects for the financing, acquisition, constructing, maintaining, operating, extending, repairing or otherwise improving any work of benefit to single zones or two or more zones. In cases of projects for the benefit of two or more zones, such zones shall become, and shall be referred to as, participating zones. For the purpose of acquiring authority to proceed with any such project, the board shall adopt a resolution specifying its intention to undertake such project, together with the engineering estimates of the cost of same to be borne by the particular zone or participating zones and fixing a time and place for public hearing of said resolution. The resolution shall refer to a map or maps showing the general location and general construction of said project. Notice of such hearing shall be given by publication pursuant to Section 6066 of the Government Code in a newspaper of general circulation designated by the board, circulated in such zone or each of said participating zones, if there be such newspaper, and if there be no such newspaper then by posting notice for two consecutive weeks prior to said hearing in two public places designated by the board, in such zone or in each of said participating zones. Publication shall be completed at least seven days before the date of the hearing. Said notice must designate a public place in such zone or in each of said participating zones where a copy or copies of the resolution and the map or maps of the proposed project may be seen by any interested person; said resolution and map or maps must be posted in each of said public places so designated in said notice at least two weeks prior to said hearing.

- (c) Objections; protests. At the time and place fixed for the hearing, or at any time to which said hearing may be continued, the board shall consider all written and oral objections to the proposed project. Upon the conclusion of the hearing the board may abandon the proposed project or proceed with the same, or a portion thereof, unless prior to the conclusion of said hearing written protests have been filed against the proposed project signed by owners of real property within the zone or participating zone the assessed value of which, as shown by the last equalized assessment roll, constitutes more than one-half of the total assessed value of the real property of such zone, in which event further proceedings relating to such project must be suspended for not less than six months following the date of the conclusion of said hearing, or said proceeding may be abandoned at the discretion of the board.
 - (d) Levy and collection of taxes. The board shall have power, in any year:
- (1) To kevy taxes upon all taxable property in each or any of said zones according to benefits derived or to be derived therein to pay the cost and expenses of carrying out any of the objects or purposes of this act of benefit to such zones, including the administering, acquiring, constructing, maintaining, operating, extending, repairing, or otherwise improving any or all works of improvement established or to be established within or on behalf of said respective zones. Said taxes shall be based upon the assessment rolls used by the county for general tax purposes and shall not exceed fifty cents (\$0.50) on each one hundred dollars (\$100) of assessed valuation, exclusive of any tax levied pursuant to subdivision (f), hereof.
- (2) Said taxes shall be levied and collected together with, and not separately from taxes for county purposes, and the revenues derived from said agency taxes shall be paid into the county treasury to the credit of the agency and the respective zones thereof, and the board shall have the power to control and order the expenditure thereof; provided, however, that no revenues, or portions thereof, derived in any of the several zones from the taxes levied under the provisions of this section shall be expended for acquiring, constructing, maintaining, operating, extending, repairing or otherwise improving any works located in any other zone, except in the case of projects for the benefit of participating zones or for projects authorized or established outside such zone or zones, but for the benefit thereof.
- (e) Bonded indebtedness; resolution declaring amounts necessary. Whenever the board determines that a bonded indebtedness should be incurred by pay the cost of any work in any zone or participating zones, the board may by resolution determine and declare the respective amounts of bonds necessary to be issued in each zone in order to raise the amount of money necessary for each work and the maximum rate of interest of said bonds. The board shall cause a copy of the resolution, duty certified by the clerk, to be filed for record in the office of the Recorder of Placer

County within five (5) days after its adoption. From and after said filing of said copy of said resolution the board shall be deemed vested with the authority to proceed with the bond election.

- (f) Special bond election; submission of question. After the filing for record of the resolution specified in subdivision (e) of this section, the board may call a special bond election in said zone or participating zones at which shall be submitted to the qualified electors of said zone or participating zones the question whether or not bonds shall be issued in the amount or amounts determined in said resolution and for the purpose or purposes therein stated. Said bonds and the interest thereon shall be paid from revenue derived from annual taxes levied upon the lands situated within the zone or participating zones, and all such lands shall be and remain liable to be taxed for such payments as provided in this act.
- (g) Resolution calling bond election. The board shall call such special bond election by resolution and submit to the qualified electors of said zone or participating zones the proposition of incurring a bonded debt in said zone or participating zones in the amount and for the purposes stated in the resolution referred to in subdivision (e) of this section. The resolution calling the bond election shall recite the objects and purposes for which the indebtedness is proposed to be incurred; provided, that it shall be sufficient to give a brief, general description of such objects and purposes, and refer to the recorded copy of the resolution referred to in subdivision (e) of this section. The resolution calling such special bond election shall also state the estimated cost of the proposed work, the amount of the principal of the indebtedness to be incurred and the maximum rate of interest to be paid on said indebtedness. Said resolution shall also fix the date on which such special election shall be held and the form and contents of the ballot to be used. The rate of interest to be paid on such indebtedness shall not exceed six percent (6%) per annum. For the purposes of said election said board shall in said resolution calling said bond election establish a special bond election precinct or precincts within the boundaries of each zone and participating zones and may form election precinct by consolidating the precincts established for general elections in the agency to a number not exceeding six general precincts for each such special bond election precinct. Said resolution shall also designate polling places and appoint at least one inspector, one judge and one clerk for each of such special bond election precincts.

- (h) Applicability of general election laws. In all particulars not recited in said resolution calling said bond election, such special bond election shall be held as nearly as practicable in conformity with the general election laws of the state.
- (i) Preparation of map; posting. The board shall cause a map to be prepared covering a general description of the work to be done, which said map shall show the location of the proposed work and shall cause the said map to be posted in a prominent place in the county courthouse for public inspection for at least thirty (30) days before the date fixed for such election.
- (j) Publication or posting of resolution calling bond election. Said resolution calling for such special bond election shall, prior to the date set for such election, be published in a newspaper of general circulation circulated in each zone and participating zone affected for six consecutive times if published in a daily newspaper of general circulation, or two times if published in a weekly newspaper of general circulation. The last publication of such resolution must be at least fourteen (14) days before said election, and if there be no such newspaper, then such resolution shall be posted in two public places designated by the board, in each zone and participating zone for at least thirty (30) days before the date fixed for such election. No other notice of such election need be given nor need polling place cards be issued.
- (k) Validity of bonds; defects or irregularities. Any defect or irregularity in the proceedings prior to the calling of such special bond election shall not affect the validity of the bonds authorized by said election. If at such election two-thirds of the votes cast in the zone or in each of the participating zones are in favor of incurring such bonded indebtedness, then bonds for such zone or participating zones for the amount stated in such proceedings may be issued and sold as in this act provided.
- (1) Form of bonds. The board shall, subject to the provisions of this act, prescribe by resolution the form of said bonds, which must include a designation of the zone or participating zones affected, and of the interest coupons attached thereto. Said bonds shall be payable annually or semiannually, at the discretion of the board, each and every year on a day and date and at a place to be fixed by said board and designated in such bonds, together with the interest on all sums unpaid on such date until the whole of said indebtedness shall have been paid.
- (m) Series bonds; maturity. The board may divide the principal amount of any issue into two or more series and fix different dates for the bonds of each series. The bonds of one series may be made payable at different dates from those of any other series. The maturity dates of each series shall comply with this section. The board may fix a date not more than two (2) years from the date of issuance for the earliest maturity of each issue or series of bonds. The final maturity date of each

issue or series shall not exceed forty (40) years from the time of incurring the indebtedness evidenced by such issue or series.

- (n) Denomination of bonds; interest; coupons; signatures. The bonds shall be issued in such denomination as the board may determine, and shall be payable on the days and at the place fixed in said bonds, and with interest at the rate specified in such bonds, which rate shall not be in excess of six percent (6%) per annum, and shall be made payable annually or semiannually, and the bonds of each issue or series shall be numbered consecutively and shall be signed by the chairman of the board, and countersigned by the auditor of the agency, and the seal of the agency shall be affixed thereto by the clerk of the board. One of such signatures may be printed, engraved or lithographed. The interest coupons of said bonds shall be numbered consecutively and signed by the said auditor by his printed, engraved or lithographed signature. In case any such officers whose signatures or countersignatures appear on the bonds or coupons shall cease to be such officers before the delivery of such bonds to the purchaser, such bonds and coupons, and signatures or countersignatures shall nevertheless be valid and sufficient for all purposes the same as if such officers had remained in office until the delivery of the bonds.
- (o) Notice inviting bids; publication. Before selling the bonds, or any part thereof, the board shall give notice not less than 10 days prior to the date of sale by publication in a newspaper of general circulation circulating in the agency inviting sealed bids in such manner as the board shall prescribe. If satisfactory bids are received, the bonds offered for sale shall be awarded to the highest responsible bidder. If no bids are received, or if the board determines that the bids received are not satisfactory as to price or responsibility of the bidders, the board may reject all bids received, if any, and either readvertise or sell the bonds at private sale.

(p) Payment of bonds; annual tax; liability of zones. Any bonds issued under the provisions of this section, and the interest thereon, shall be paid by revenues derived from an annual tax upon all taxable property in the zone or participating zones sufficient to pay the interest and such portion of the principal of said bonds as is due or to become due before the time for making the next general tax levy. No zone nor the property therein shall be liable for the share of bonded indebtedness of any other zone, nor shall any moneys derived from taxation in any of the several zones be used in payment of principal or interest or otherwise of the share of the bonded indebtedness chargeable to any other zone. Such taxes shall be levied and collected in the respective zones or participating zones, together with and not separately from taxes for county purposes, and the revenues derived from said taxes shall be paid into the county treasury of said Placer County to the credit of the zone of payment, and thereafter paid to the agency treasurer pursuant to Section 14.8 and be used for the payment of the principal and interest on said bonds, and for no other purpose. It is hereby declared that for the purposes of any tax levied pursuant to this subdivision (p), the property so taxed within a given zone is equally benefited.

(Amended by Stats.1969, c. 358, p. 877, § 6, eff. July 3, 1969.)

45 81-15.1 to 81-15.4. Repealed. Stats.1959, c. 815, p. 2834, § 29

Historical Note

The repealed sections, derived from Stats, 1957, c. 1234, pp. 2533-2535, §§ 15.1-15.4, related to bonds. Sec. now, § 81-15.

§ 81-15.1. Annexation to or detachment of territory from zone

- Sec. 15.1. (a) Territory may be annexed to a zone or territory within an existing zone may be detached therefrom under the procedure set forth in this section.
- (b) Whenever any territory is annexed to a zone, the annexed territory shall be subject to all the liabilities and entitled to all the benefits of that zone.
- (c) Whenever any territory is detached from a zone, except as otherwise provided for herein, the territory detached, all inhabitants within such territory and all persons formerly entitled to vote by reason of residing within such zone shall cease to be subject to the jurisdiction of such zone and shall have none of the rights or duties of the remaining territory or voters of such zone upon and after the effective date of the detachment.

No inhabitant, property owner, taxpayer, consumer, or user within territory detached from a zone shall be entitled (i) to all or any part or to any payment on account of the moneys or funds (including cash on hand and moneys due but uncollected) or any property, real or personal, of such zone or (ii) to any refund by-reason of any taxes, assessments, service charges, rentals or rates collected prior to the effective date of the detachment.

Territory detached from a zone shall continue to be liable for the payment of principal, interest and any other amounts which shall become due on account of any bonds, including revenue bonds, or other contracts or obligations of the zone within which the detached territory shall have been situated, as shall be outstanding on the effective date of detachment and shall be subject to the levying or fixing and collection of any (i) taxes or assessments, or (ii) service charges, rentals or rates, or (iii) both, as may be necessary to provide for such payment.

- (d) The board shall adopt a resolution initiating proceedings for annexation or detachment, which resolution shall contain all the following:
 - (I) The exterior boundaries of the territory proposed for annexation or detachment.
 - (2) A statement of the reasons for the proposed annexation or detachment.
 - (3) Fix a time, date, and place of hearing on the proposed annexation or detachment.
- (4) State that any interested person desiring to make written protest against such annexation or detachment shall do so by written communication, containing the signature and street address of the protestant, filed with the clerk of the agency not later than the hour set for the hearing.
- (e) The clerk of the agency shall give notice of the hearing by mailing a copy of such notice to all 20-landowners owning land within the territory proposed to be annexed or detached, and by publishing notice thereof in at least two successive issues, not more than 30 nor less than 10 days prior to the hearing, in a newspaper of general circulation published in the agency.

- (f) A majority protest shall be deemed to exist, and the proposed annexation or detachment shall be abandoned, if the agency shall find that written protests filed and not withdrawn prior to the conclusion of the hearing represent more than 50 percent of the assessed value of the land and improvements within the territory proposed to be annexed or detached.
- (g) At the hearing, all interested persons shall be given the opportunity to present evidence and testimony for or against the proposed annexation or detachment. Any person who shall have filed a written protest may withdraw the written protest at any time prior to the conclusion of the hearing.

If a majority protest shall not have been filed, the board, not later than 30 days after the conclusion of the hearing, shall adopt a resolution making one of the following determinations:

- (1) Disapproving the proposed annexation or detachment.
- (2) Approving the proposed annexation or detachment.
- (3) Approving the annexation or detachment, but excluding any lands which the board finds will not be benefited by such annexation or detachment.
- (h) If the board approves the proposed annexation or detachment, or approves it but excludes any lands, a certified copy of the resolution of the board, together with a map or plat of the new boundaries of the zone, shall be filed with the agencies designated in, and as required by, Sections 54900, 54901, and 54902 of the Government Code. Upon such filing, the annexation or detachment of the territory to the zone shall be effective.

(Added by Stats.1974, c. 630, p. 1479, § 2.)

Library References

Municipal Corporations €27 et seq. C.J.S. Municipal Corporations § 41.

§ 81-15.2. Zone advisory council

Sec. 15.2. The board may by resolution create an advisory council for any zone to assist and advise the board on all matters pertaining to that zone. Each such council shall consist of not more than five members appointed by and serving at the pleasure of the board. Each council member shall be either a resident of or the owner of property in the zone for which the council is appointed. Council members shall receive such sum as is fixed by the board, up to a maximum of twenty-five dollars (\$25), for each meeting of the council attended by the member, not exceeding two meetings per month, plus actual, necessary and reasonable traveling expenses. The compensation set for the various advisory councils need not be the same, but in no event may it exceed the maximum provided for in this section.

(Added by Stats.1974, c. 630, p. 1480, § 3.)

§ 81-15.5. Formation of improvement districts; powers and duties of board

Sec. 15.5. Improvement districts may be formed in the agency for any authorized purpose of the agency in the same manner as improvement districts are formed in irrigation districts. When formed, such improvement districts shall be governed in the same manner as improvement districts in irrigation districts. The board shall have the same rights, powers, duties and responsibilities with respect to the formation and government of improvement districts in the agency as the board of directors of an irrigation district has with respect to improvement districts in irrigation districts. Assessments in an improvement district in the agency shall be levied, collected and enforced at the same time and as nearly in the same manner as practicable as annual taxes of the county, except that the assessment shall be made in the same manner as provided with respect to improvement districts in irrigation districts.

(Added by Stats.1971, c. 120, p. 164, § 2, eff. June 4, 1971.)

Library References

Waters and Water Courses €1831/6. CJ.S. Waters § 243.

§ 81-15.6. Works or improvements under Improvement Act of 1911 or Municipal Improvement
Act of 1913

Sec. 15.6. Whenever in the opinion of the board the public interest or convenience may require, it may order any work or improvement which it is authorized to undertake to be done in accordance with the procedure and in pursuance of the provisions of either the Improvement Act of 1911, Division 7 (commencing at Section 5000) of the Streets and Highways Code, or the Municipal Improvement Act of 1913, Division 12 (commencing at Section 10000) of the Streets and Highways Code.

The following terms, as used in such improvement acts have the following meaning:

- (a) "Municipality" or "city" means the agency;
- (b) "City council" or "legislative body" means the board of directors of the agency;
- (c) "City treasurer" or "treasurer" means the officer of the agency who has charge of and makes payment of the agency funds;
 - (d) "Mayor" means the chairman of the agency;
- (e) "Clerk" means the secretary of the agency;
- (f) "Council chambers" means the place where the regular meetings of the board of directors are held;
- (g) "Superintendent of streets," or "street superintendent" and "city engineer" mean the general manager of the agency, or any other person appointed to perform such duties;
 - (h) "Tax collector" means the county tax collector;
- (i) "Right-of-way" means any parcel of land through which a right-of-way has been granted to the agency for any purpose;
- (j) All other words and terms relating to municipal officers and matters refer to the corresponding officers of the agency and matters under this act.

(Added by Stats.1971, c. 120, p. 165, § 3, eff. June 4, 1971.)

Library References

Waters and Water Courses ←183½: C.J.S. Waters § 243. Words and Phrases (Perm.Ed.)

§ 81-16. Revenue bonds

Sec. 16. If the board by resolution determines that a bonded indebtedness to pay the acquisition or construction of any works for any purposes of the agency or for refunding any outstanding bonds should be incurred and can be repaid and liquidated as to both principal and interest from revenues designated by the board, the agency is authorized and shall have the power to define such works as an "enterprise" and to issue-revenue bonds, all in the manner and as provided in the Revenue Bond Law of 1941; provided, however, that, notwithstanding the provisions of Government Code Section 54310, the board shall have the power, subject to the limitations of Section 4.1 hereof, to borrow money and issue revenue bonds for, and to define "enterprise" to include, systems, plants, works or undertakings for the generation, production, transmission and sale of hydroelectric energy; and provided, further, that notwithstanding the provisions of Section 54400 of the Government Code, the board may determine and provide, in any resolution for the issuance of revenue bonds, for maturity dates of the revenue bonds not exceeding 50 years from their date of is-

If the interest and principal of the revenue bonds and all charges to protect or secure them have been paid when due, an amount for the necessary and reasonable maintenance and operation costs of the enterprise, which costs include the reasonable expenses of management, repaid and other expenses necessary to maintain and preserve the enterprise in good repair and working order, may be apportioned from the revenues, and subject to any limiting covenants in the resolution providing for the issuance of bonds, the remaining surplus may be used for any lawful purpose of the agency, which, without limiting the generality of the foregoing, shall include the right and authority to expend any or all of such surplus as contributions in aid of necessary extensions of water storage and distribution facilities of the agency, payments in lieu of taxes to any or all political subdivisions, including but not limited to school districts, upon works of the agency situate within such political subdivisions in the County of Placer, and the purchase or obtaining of additional water supplies. (Stats.1957, c. 1234, p. 2535, § 16, as amended Stats.1959, c. S15, p. 2831, § 19; Stats.1961, c. 301, p. 1336, § 1, effective May S, 1961; Stats.1967, c. 117,

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§ 81-17. Legal investments

Sec. 17. All revenue bonds issued by the agency may be certified as legal investments, pursuant to the District Securities Law, Division 10 (commencing with Section 20000) of the Water Code, in the manner and to the extent provided in Sections 54433 and 54434 of the Government Code.

(Amended by Stats.1971, c. 214, p. 324, § 196.)

§ 81-18. Action to test validity of bonds, tax levy or contract

Sec. 18. An action to determine the validity of bonds, levy of a special assessment or a contract may be brought pursuant to Chapter 9 (commencing with Section 800) of Title 10 of Part 2 of the Code of Civil Procedure. In any such action all findings of fact or conclusions of the board upon all matters shall be conclusive unless the action was instituted within six months after the finding or conclusion was made. (Formerly § 81-30, Stats.1957, c. 1234, p. 2542, § 30. Renumbered § 81-18, and amended Stats.1959, c. 815, p. 2832, § 21, as amended Stats.1961, c. 1040, p. 2724, § 1.)

Historical Note

Former section \$1-18, derived from to revenue bonds, was repealed by Stats. Stats.1957, c. 1234, p. 2436, § 18, relating 1959, c. 815, p. 2534, § 29.

§ 81-19. Effect upon districts within limits of agency

Sec. 19. Neither the establishment of the agency nor any provision of this act shall affect, restrict nor supersede the existence, property, right, or power of any district, now or hereafter established in or partially within the limits of the agency for the

purpose of flood control, reclamation, conservation, storage, distribution, sale, use, or development of water. The Legislature, because of conditions special to the county, hereby expressly declares its intent to permit within the limits of the Placer County Water Agency, the existence of more than one district, having similar powers over similar territory in regard to flood control, reclamation and water conservation, storage, distribution, sale, use or development. (Formerly § 81-32, Stats.1957, c. 1234, p. 2543, § 32. Renumbered § 81-19, and amended Stats.1959, c. 815, p. 2832, § 22.)

Historical Note

Former section 81—19, derived from revenue bonds, was repealed by Stats.1959. Stats.1957, c. 1234, p. 2536, § 19, relating to c. 815, p. 2834, § 29.

\$5 81-19.1 to 81-19.21 Repealed. Stats.1959, c. 815, p. 2834, § 29

Historical Note

The repealed sections, derived from Stats. related to indenture agreements, designa-1957, c. 1234, pp. 2536-2539, §§ 15.1-19.21, tion of trustees and series bonds.

§ 81-20. Vested rights

Sec. 20. Neither the formation of the agency nor this act shall impair the vested right of any person, association, corporation or district in or to any water or the use thereof. (Formerly § 81-33, Stats.1957, c. 1234, p. 2543, § 33. Renumbered § 81-20, and amended, Stats.1959, c. 815, p. 2833, § 23.)

Historical Note

Former section \$1-20, derived from to coupon bonds and registered bonds, was Stats.1857, c. 1234, p. 2533, § 20, relating repealed by Stats.1959, c. \$15, p. 2834, § 29. §§ 81-20.1 to 81-20.8 Repealed. Stats.1959, c. 815, p. 2834, § 29

Historical Note

The repealed sections, derived from Stats.1957, c. 1234, pp. 2533, 2540, §§ 20.1-20.8, related to bonds. Sec. now, § 81-15.

5 81-21. Action to test validity of existence of agency

Sec. 21. The agency, in order to determine the legality of its existence, may institute a proceeding therefor in the Superior Court of this State, in and for the County of Placer, by filing with the clerk of said county a complaint setting forth the name of the agency, its exterior boundaries, the date of its organization and a prayer that it be adjudged a legal agency formed under this act. The summons in such proceeding shall be served by publishing a copy thereof once a week for four weeks in a newspaper of general circulation published in the county. The State of California shall be a defendant in such action, and consent therefor is given. Service of summons therein shall be made on the Attorney General. The Attorney General shall appear in such action on behalf of the State in the same manner as with appearances in civil actions. Within thirty (30) days after proof of publication of said summons the State, any property owner or resident in said agency, or any person interested may appear as a defendant in said action by serving and filing an answer to said complaint, in which case said answer shall set forth the facts relied upon to show the invalidity of the agency and shall be served upon the district attorney before being filed in such proceeding. Such proceeding is hereby declared to be a proceeding in rem and the final judgment rendered therein shall be conclusive against all persons whomsoever, including the agency and the State of California. (Formerly § 81-34, Stats.1957, c. 1234, p. 2543, § 34. Renumbered § 81-21, and amended Stats.1959, c. 815, p. 2833, § 24.)

Historical Note

Former section \$1-21, derived from to tax exemption of bonds, was repealed Stats.1957, c. 1234, p. 2540, § 21, relating by Stats.1959, c. \$15, p. 2834, § 29,

Cross References

Publication in newspapers, see Government Code \$ 6000 et seq. Summons, service by publication, see Code of Civil Procedure, \$\$ 412, 413, 416.

§ 81-21.1 Repealed. Stats.1959, c. 815, p. 2834, § 29

Historical Note

The repealed section, derived from Stats.1957, c. 1234, p. 2540, § 21.1, related to bonds as legal investments.

Sec. 22. The agency may be dissolved in the manner provided for the dissolution of districts by Chapter 4, commencing at Section 58950, of Division 1 of Title 6 of the Government Code, and the agency shall be considered a district within the meaning of all of the provisions of said chapter. (Formerly § \$1-35, Stats.1957, c. 1234, p. 2544, § 35. Renumbered § 81-22, and amended Stats.1959, c. 815, p. 2833, § 25.)

Historical Note

to funding or refunding revenue bonds, was repealed by Stats.1959, c. 815, p. 2831, § 29. Former section \$1-22, derived from Stats 1957, c. 1234, p. 2541, § 22, relating

§ 81-23. Legislative finding and declaration

Sec. 23. The Legislature hereby finds that water problems in the county require county-wide water conservation, flood control and development of water resources; that all land within the county will be benefited thereby; that the solution of these problems lies within and is peculiar to the area to be included in the agency; that these problems are not general or statewide; that the county for many years has made investigations and engineering surveys of the county's water resources by private, public and United States engineers; that county water districts, municipalities, and water conservation districts now exist within portions of the county, have acquired property and works, developed a limited water supply, and have incurred indebtedness, but have been and are unable alone to economically develop an adequate water supply and control the floods of said county and for such reason it is necessary to have a political entity coextensive with the geographical limits of the entire county; that the county cannot be supplied with water from a common source or by a common system of works; that investigation having shown conditions in said county to be peculiar to it. It is, therefore, hereby declared that a general law cannot be made applicable to said county and that the enactment of this special law is necessary for the conservation, development, control and use -24of said water for the public good and for the protection of life and property therein. (Formerly § 81-36, Stats.1957, c. 1234, p. 2544, § 36. Renumbered § 81-22, and amended Stats, 1959, c. 815, p. 2813, § 26.)

Historical Note

Former section \$1-23 derived from Stats. Ing or refunding revenue bonds, was re-1957, c. 1231, p. 2541, 1 23, relating to fund-pealed by Stats. 1959, c. 815, p. 2534, 1 29.

§ 81-24. Partial invalidity

Sec. 24. If any provision of this act is declared unconstitutional or invalid, for any reason, the remainder of the act shall not thereby be invalidated, but shall remain in full force and effect. (Formerly § 81-37, Stats.1957, c. 1234, p. 2544, § 37. Renumbered § \$1-24, and amended Stats.1950, c. \$15, p. 2834, § 27.)

Historical Note

Former section \$1-24, derived from Stats. 1357, c. 1234, p. 2541, 1 24 relating to nego- 1259, c. \$15, p. 2534, 1 29.

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§ 81-25. Short title

Sec. 25. This act may be designated and referred to as "the Placer County Water Agency Act," and any reference thereto by such designation shall be sufficient for all purposes. (Formerly § 81-38, Stats.1957, c. 1234, p. 2544, § 38. Renumbered § 81-25, and amended Stats.1959, c. 815, p. 2834, \$ 28.)

Historical Note

Former section \$1-25, derived from Stats.

of bond proceeds and maximum amount of bonds, was repealed by Stats.1959, c. \$15, lution of board declaring purpose for use

p. 2834, § 29.

§§ 81-26 to 81-29. Repealed. Stats.1959, c. 815, p. 2834, § 29

Historical Note

The repealed sections, derived from State.
1957, c. 1234, pp. 2541, 2542, 55 26-29, related to Insurance agreement provisions relating to

- § 81-30. Renumbered § 81-18 and amended. Stats.1959, c. 815, p. 2832, § 21
- § 81-31. Blank
- § 81-32. Renumbered § 81-19 and amended. Stats.1959, c. 815, p. 2832, § 22
- § 81-33. Renumbered § 81-20 and amended. Stats.1959, c. 815, p. 2833, § 23
- § 81-34. Renumbered § 81-21 and amended. Stats. 1959, c. 815, p. 2833, § 24
- § 81-35. Renumbered § 81-22 and amended. Stats.1959, c. 815, p. 2833, § 25
- § 81-36. Renumbered § 81-23 and amended. Stats.1959, c. 815, p. 2833, § 26 § 81-37. Renumbered § 81-24 and amended. Stats.1959, c. 815, p. 2834, § 27
- § 81-38. Renumbered § 81-25 and amended. Stats.1959, c. 815, p. 2834, § 28

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GENERAL PROVISIONS

Arbitration of Public Works Contract Claims	Section 22200	0
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Part 1

ADMINISTRATIVE PROVISIONS

Chap	ter Section
1.6.	Electronic Transmissions
2.	Responsive Bidders
2.5.	Certification of Minority and Women Business Enterprises
4.	Subletting and Subcontracting
6.	Awarding of Contracts

Chapter 1

DEFINITIONS

Section

1102. Emergency.

§ 1101. Public works contract

Code of Regulations References

Office of small business procurement and contracts, see 2 Cal. Code of Regs. § 1896 et seq.

Notes of Decisions

Reclaimed water use 1

Reclaimed water use
 Primary purpose of agreement for reclaimed water use
was to dispose of sludge and reclaimed water in utilitarian

fashion which, absent agreement, sanitation district would otherwise perform itself, and thus, agreement fell within definition of "public work contract." Boydston v. Napa Sanitation Dist. (App. 1 Dist. 1990) 272 Cal.Rptr. 458, 222 Cal.App.3d 1362, rehearing denied 273 Cal.Rptr. 331, 222 Cal.App.3d 1362.

§ 1102. Emergency

"Emergency," as used in this code, means a sudden, unexpected occurrence that poses a clear and imminent danger, requiring immediate action to prevent or mitigate the loss or impairment of life, health, property, or essential public services.

(Added by Stats.1994, c. 803 (A.B.3348), § 1.)

Additions or changes indicated by underline; deletions by asterisks * * *

Article 97

PLACER COUNTY WATER AGENCY

 Contracts; advertisement exception; emergency work.

§ 21320. Application of article

Library References

Statutes ←191. C.J.S. Statutes § 329.

§ 21321. Contracts; bids; performance bonds; emergency work; work by force account; materials and supplies

All contracts for any improvement or unit of work, when the cost according to the estimate of the engineer will exceed five thousand dollars (\$5,000), shall be let to the lowest responsible bidder or bidders as provided in this article. The board shall first determine whether the contract shall be let as a single unit * * *, or divided into severable * * * parts. The board shall advertise for bids by three insertions in a daily newspaper of general circulation or by two insertions in a weekly newspaper * * * of general circulation printed and published in the * * * agency's jurisdiction, inviting sealed proposals for the construction or performance of the improvement or work. The call for bids shall state whether the work shall be performed in one unit or divided into parts. The work may be let under a single contract or several contracts, as stated in the call. The board shall require the successful bidders to file with the board good and sufficient bonds to be approved by the board conditioned upon the faithful performance of the contract and upon the payment of their claims for labor and material. The bonds shall comply with * * Title 15 (commencing with Section 3082) of Part 4 of Division 3 of the Civil Code. The board may reject any * * * bid. In the event all proposals are rejected or no proposals are received, or the estimated cost of the work does not exceed five thousand dollars (\$5,000), or the work consists of channel protection, maintenance * * *, or emergency work * * *, the board may have the work done by force account without advertising for bids. In case of an emergency, if notice for bids to let contracts will not be given, the board shall comply with Chapter 2.5 (commencing with Section 22050). In the event that no proposals are received, or if only one responsive proposal is received, the board may negotiate a contract for construction or performance of the work or improvement or substantially similar work or improvement; provided, that if only one responsive proposal is received * * *, the contract must be negotiated with the bidder. The agency may purchase in the open market without advertising for bids, materials and supplies for use in any work, either under contract or by force account. Sections 4300 to 4305,

inclusive, of the Government Code ¹ do not apply to the agency's Middle Fork American River Project. The provisions of this section apply to all proposals or contracts whether or not received or entered into prior to the effective date of the amendment of this provision made at the 1963 Regular Session of the Legislature.

(Amended by Stats.1994, c. 803 (A.B.3348), § 51.)

1 Repealed; see, now, Civil Code §§ 3247, 3248.

Cross References

Emergency defined, see Public Contract Code \$ 1102.

Library References

Waters and Water Courses ⇔183½. C.J.S. Waters § 243.

§ 21322. Contracts; advertisement exception; emergency work

Notwithstanding the provisions of Section 21321, contracts may be let for work without advertising in cases of significant emergency as determined by the board. Cases of significant emergency include, but are not limited to:

- (1) States of emergency as specified in Section 8558 of the Government Code.
- (2) When emergency repair or replacement is necessary to permit the continued operation or service of the agency.
 - (3) When the emergency work is necessary to avoid danger to life or property.

Any action taken under this section must be authorized by a unanimous vote of the board members present. Additionally, the board must find, based on substantial evidence set forth in the minutes of its meeting, that the emergency work is necessary for the stated reasons.

(Added by Stats.1993, c. 687 (A.B.1225), § 1. eff. Oct. 4. 1993.)

(b) On those projects set forth in subdivision (b) or (c) of Section 22042, the public agency state the commission's findings to its governing body and that governing body shall conduct a public hearing with regard to the commission's findings within 30 days of receipt of the findings.

(Formerly § 21214, added by Stats.1983, c. 1054, § 1. Renumbered § 22044 and amended by Stats.1986, c. 1019, § 66.)

Historical and Statutory Notes

1986 Legislation

Renumbering of this section as § 21914 and amendment by Stats.1986, c. 248, was subordinated to its renumbering and amendment by Stats.1986, c. 1019. See Historical Note under Bus. & Prof.C. § 5678.5.

§ 22045. Implementation of procedures review; commission recommendation

- (a) No later than January 1, 1985, the commission shall recommend, for adoption by the Controller, written procedures implementing the accounting procedures review provided for in this article.
- (b) The Controller shall, upon receipt of the commission's recommendation, review and evaluate the recommended procedures and either formally adopt or reject the recommended procedures within 90 days of submission of the commission.

(Formerly § 21215, added by Stats.1983, c. 1054, § 1. Renumbered § 22045 and amended by Stats.1986, c. 1019, § 67.)

Historical and Statutory Notes

1986 Legislation

Renumbering of this section as § 21915 and amendment by Stats 1986, c. 248, was subordinated to its renumbering

and amendment by Stats.1986, c. 1019. See Historical Note under Bus. & Prof.C. § 5678.5.

Chapter 2.5

EMERGENCY CONTRACTING PROCEDURES

Section

22050. Contracts without bids; procedures.

Chapter 2.5 was added by Stats. 1994, c. 808 (A.B. 3848), § 88.

§ 22050. Contracts without bids; procedures

(a)(1) In the case of an emergency, a public agency, pursuant to a four-fifths vote of the governing body, may repair or replace a public facility, take any directly related and immediate action required by that emergency, and procure the necessary equipment, services, and supplies for those purposes, without giving notice for bids to let contracts.

(2) Before a governing body takes any action pursuant to paragraph (1), it shall make a finding, based on substantial evidence set forth in the minutes of its meeting, that the emergency will not permit a delay resulting from a competitive solicitation for bids, and that the action is necessary to respond to the emergency.

(b)(1) The governing body, by a four-fifths vote, may delegate, by resolution or ordinance, to the appropriate county administrative officer, city manager, chief engineer, or other nonelected agency officer the authority to order any action pursuant to paragraph (1) of subdivision (a).

Additions or changes are indicated by underline; deletions by asterisks * * *

- (2) If the public agency has no county administrative officer, city manager, chief engineer, or other nonelected agency officer, the governing body, by a four-fifths vote, may delegate to an elected officer the authority to order any action specified in paragraph (1) of subdivision (a).
- (3) If a person with authority delegated pursuant to paragraph (1) or (2) of this section orders any action specified in paragraph (1) of subdivision (a), that person shall report to the governing body, at its next meeting required pursuant to this section, the reasons justifying why the emergency will not permit a delay resulting from a competitive solicitation for bids and why the action is necessary to respond to the emergency.
- (c)(1) If the governing body orders any action specified in subdivision (a), the governing body shall review the emergency action at its next regularly scheduled meeting and, except as specified below, at every regularly scheduled meeting thereafter until the action is terminated, to determine, by a four-fifths vote, that there is a need to continue the action. If the governing body meets weekly, it may review the emergency action in accordance with this paragraph every 14 days.
- (2) If a person with authority delegated pursuant to subdivision (b) orders any action specified in paragraph (1) of subdivision (a), the governing body shall initially review the emergency action not later than seven days after the action, or at its next regularly scheduled meeting if that meeting will occur not later than 14 days after the action, and at least at every regularly scheduled meeting thereafter until the action is terminated, to determine, by a four-fifths vote, that there is a need to continue the action, unless a person with authority delegated pursuant to subdivision (b) has terminated that action prior to the governing body reviewing the emergency action and making a determination pursuant to this subdivision. If the governing body meets weekly, it may, after the initial review, review the emergency action in accordance with this paragraph every 14 days.
- (3) When the governing body reviews the emergency action pursuant to paragraph (1) or (2), it shall terminate the action at the earliest possible date that conditions warrant so that the remainder of the emergency action may be completed by giving notice for bids to let contracts.
 - (d) As used in this section, "public agency" has the same meaning as defined in Section 22002.
- (e) A three-member governing body may take actions pursuant to subdivision (a), (b), or (c) by a two-thirds vote.
- (f) This section applies only to emergency action taken pursuant to Sections 20133, 20168, 20193, 20205.1, 20134, 20168, 20205.1, 20213, 20223, 20233, 20253, 20273, 20283, 20293, 20313, 20331, 20567, 20586, 20604, 20635, 20645, 20685, 20736, 20751.1, 20806, 20812, 20914, 20918, 20926, 20931, 20941, 20961, 20991, 21020.2, 21024, 21031, 21043, 21061, 21072, 21081, 21091, 21101, 21111, 21121, 21131, 21141, 21151, 21161, 21171, 21181, 21191, 21196, 21203, 21212, 21221, 21231, 21241, 21251, 21261, 21271, 21290, 21311, 21321, 21331, 21341, 21351, 21361, 21371, 21381, 21391, 21401, 21411, 21421, 21431, 21441, 21451, 21461, 21472, 21482, 21491, 21501, 21511, 21521, 21531, 21541, 21552, 21567, 21572, 21581, 21591, 21601, 21618, 21624, 21631, 21641, and 22035.

(Added by Stats.1994, c. 803 (A.B.3348), § 88.)

Cross References

Emergency defined, see Public Contract Code § 1102.

Chapter 3

ACQUISITION OF ELECTRONIC DATA PROCESSING

§ 22102. District

Cross References

GOVERNMENT CODE

wer, or water and sewer services to the affected lands, and may restrict the assessment to one or more improvement districts or zones of benefit established within the jurisdiction of the agency. The charge may be imposed on an area, frontage, or parcel basis, or a combination thereof. (Added by Stats.1988, c. 834, § 1.)

§ 54984.3. Resolution adopted by governing body; contents

The governing body of the local agency shall adopt a resolution to initiate proceedings to fix a standby charge. The resolution shall contain all of the following:

- (a) A statement that the report of a qualified engineer is on file with the agency and that a standby charge is proposed based upon the report. The report shall include all of the following:
- (1) A description of the charge and the method by which it will be imposed.
- (2) A compilation of the amount of the charge proposed for each parcel subject to the charge.
- (3) A statement of the methodology and rationale followed in determining the degree of benefit conferred by the service for which the charge is made.
 - (4) The other factors listed in Section 54984.2
- (b) A description of the lands upon which the charge is to be imposed. Assessor parcel numbers shall constitute sufficient description for this purpose
- (c) The amount of the charge for each of the lands so described.
- (d) The date, time, and place upon which the governing body will hold a public protest hearing regarding the imposition of the charge, and notice that the governing body will hear and consider all objections or protesta, if any, to the proposed charges.

(Added by Stats.1988, c. 834, § 1.) 4 54984.4. Notice of hearing

- (a) The local agency shall cause notice of * * the date, time, and place of hearing on the charge to be published, pursuant to Section 6066, prior to the date set for hearing, in a newspaper of general circulation printed and published within the jurisdiction of the entity, if there is one, and if not, then in a wapaper of general circulation printed and published in the county.
- "* (b) The local agency shall also cause a notice in writing of the date, time, and place of hearing on the charge to be mailed " " at least 21 days prior to the date set for hearing, to each owner of land described in the resolution initiating proceedings. The mailed notice shall include the name and address of the local agency, a description of the charge and method by which it is proposed to be imposed, the amount of the charge or a schedule of charges, the address or addresses of the place or places where the resolution adopted pursuant to Section 54884.3 may be reviewed, and a summary of the procedures for making a protest set forth in Section 54884.6. The notice shall be mailed to the address shown on the last equalized assessment roll, or known to the secretary or clerk of the local agency.

(Added by Stats.1988, c. 834, § 1. Amended by Stats.1992, c. 492 (A.B.3304), § 1.)

\$ 54984.5. Hearing

At the time and place stated in the notice, the governing body shall conduct the hearing, and shall hear and consider all objections or protests, if any, to the resolution referred to in the notice, and may continue the hearing from time to time. Upon the conclusion of the hearing, the governing board may adopt, revise, change, reduce, or modify, or withdraw a charge. The governing board shall make its determination upon each assessment or charge described in the resolution, which determination shall be

(Added by Stats.1988, c. 834, § 1.)

§ 54984.6. Protest by landowner; contents; withdrawal

- (a) Any landowner desiring to make a protest shall do so by written communication filed with the local agency not later than the hour set for the hearing. A protest by a landowner shall contain a description sufficient to identify the land owned by the landowner. A written protest may be withdrawn at any time before the determination on the charge by the governing body.
- (b) If the governing body receives written protests which are not withdrawn at the time of determination by the governing body, which protests represent 40 percent of the parcels subject to the charges authorized by this chapter, no further proceedings may be had under this chapter until a period of one year shall have passed from the time of the initiation of this procedure.

Additions or changes indicated by underline; deletions by asterisks * * *

(c) If the governing body receives written protests which are not withdrawn at the time of the determination by the governing body, which profests represent 15 percent or more of the parcels subject to the charges authorized by this chapter the governing body may still adopt, revise, change, reduce, or modify a charge, but all the charges are ineffective until collectively approved by a majority of the vote in an election within the affected territory in which the owner of one or more parcels may cast one vote for each parcel owned within the affected territory.

(Added by Stata.1988, c. 834, § 1.)

§ 54984.7. Continuation of charge in successive years at same rate; notice

If the procedures set forth in this chapter have been followed in a given year, the governing body may, by resolution, continue the charge in successive years at the same rate and in the same manner, but dispensing with the requirement for mailed notice. The local agency shall cause notice of the intent to adopt the resolution to be published pursuant to Section 6066, prior to the date set for adoption, and shall hear any and all objections at the time and place set forth in the notice. The governing body shall, at the time and place specified, conduct the hearing and consider all objections to the assessment, if any. The governing body may, thereafter, adopt, revise, reduce, or modify the assessment or charge, but may not increase the charge, or may overrule any and all objections. The determination of the governing body shall be final. This section shall not apply if the amount of the assessment is increased, or if the governing body makes any change in the areas subject to the assessment, compared to the prior year's assessment.

(Added by Stats.1988, c. 834, § 1. Amended by Stats.1992, c. 1208 (A.B.2635), § 4.)

§ 54984.8. Final determination; collection

After the making of a final determination pursuant to Sections 54984.5 and 54984.7 and after any required majority approval by the voter within affected territory the local agency shall cause the charge to be collected at the same time, and in the same manner, as is available to it under applicable law. (Added by Stats.1988, c. 834, 4 1.)

§ 54984.9. Delinquent charges; lien; filing of certificate

- (a) A local agency may, by resolution or ordinance, provide that charges that have become delinquent, together with interest and penalties thereon, are a lien on the property when a certificate is filed in the office of the county recorder pursuant to subdivision (b), which lien has the force, effect, and priority of a judgment lien.
- (b) A lien under this section attaches when the district files for recordation in the office of the county recorder a certificate specifying the amount of the delinquent charges together with interest and penalties thereos; the name of the owner of record of the property which is subject to the charges; and the assessor's parcel number and legal description of the property. Within 30 days to receipt of payment of all amounts due, including recordation fees paid by the district, the district shall file for recordation a release of the lien.

(Added by Stats.1988, c. 834, § 1.)

CHAPTER 12.5

COUNTY FEES

Section

54985. Authority to increase or decrease fees or charges; basis; disputes; application of chapter.

54986. Public meetings; notice; public data; action of board by ordinance; costs. 54987. Construction of chapter.

Chapter 12.5 was added by Stats. 1988, c. 295, § 1.

Cross References

Processing fee for payment of delinquent taxes in in-stallments, see Revenue and Taxation Code § 4217. Processing of an application for separate valuation of any parcel for redemption, see Revenue and Taxation Code § 4151.

parcel on current roll, see Revenue and Taxation Code § 2821. Processing of an application for separate valuation of

Additions or changes indicated by underline; deletions by asterisks * * *

APPENDIX D

Splash or Sprinkle?

Comparing the Water Use of Swimming Pools and Irrigated Landscape

SPLASH OR SPRINKLE? COMPARING THE WATER USE OF SWIMMING POOLS AND IRRIGATED LANDSCAPES

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Abstract

Residential water use is typically a significant portion of a water agencies' water demand particularly in smaller suburban communities. Summer outdoor water use commonly drives the peak system capacity requirements and therefore a meaningful target for water conservation programs. This paper provides water conservation planners with insight into residential outdoor water use patterns. A comparison of water use of swimming pools and irrigated landscape area is analyzed from information gathered from 1,129 homes in 14 locations in the United States and Canada as part of the Residential End Uses of Water Study by American Water Works Association Research Foundation (Mayer et. al., 1999). It is found that for the 194 homes with swimming pools, the addition of a swimming pool increased demand between 22 to 25 percent. The addition of an automatic sprinkler system increased demand between 54.9 to 60.6 percent. Homes with both a swimming pool and an automatic sprinkler system used the most water over 110 percent more water outdoors than homes without these amenities. Using water use estimates for a typical home in Sacramento, California and Tampa, Florida, it was determined that swimming pools and irrigated lawn area use approximately the same amount of water on a square footage basis. In other words, if a homeowner in these regions were to remove turf grass and install a swimming pool, the water use for each square foot of grass replaced by pool water surface area would be approximately the same.

Introduction

Do swimming pools and irrigated landscape area use the same amount of water on a square footage basis? Does the replacement of turf grass with a swimming pool typically result in an increase in water use? The economic boom of the last decade has fueled increased construction of private in-ground swimming pools. The National Spa and Pool Institute estimates that there are approximately 7 million swimming pools in the United States -- 3.8 million in-ground pools and 3.2 million aboveground pools (Mellezi, 2001). In 1998 alone, the National Spa and Pool Institute determined 172,184 in-ground pools were built. Water planners and conservation

professionals must account for the increased popularity of the recreational use of water within the residential sector in their long range plans and conservation programs.

When installing a swimming pool, most homeowners dig up an existing landscaped area. This raises the question of the new water use characteristics generated by the addition of a swimming pool. How much water is a swimming pool likely to use compared to turf landscape covering the same area? Diving into this issue requires analysis of a variety of factors including pool water losses from the direct evaporation, the evapotranspiration of turf grass, and the actual efficiency of lawn irrigation systems (typically between only 30-50% efficient). Also, if the comparison of swimming pool water use to irrigated landscape were based on landscape design, then would the results vary?

The Residential End Uses of Water study (REUWS), sponsored by AWWARF, involved collection of outdoor water use data from approximately 1,129 homes in 14 study sites including irrigable landscape area and surface area for swimming pools (Mayer et. al, 1999). Using these data, a comparison of outdoor water use normalized for irrigated area and climatic effects is performed and results presented. A theoretical analysis of water use in swimming pools that considers the impact of evaporation, backwashing, splash loss, maintenance and leakage is included and a basic estimation of applied water to irrigated lawn area provided with sample calculations for Sacramento, California and Tampa, Florida.

Purpose

Conventional wisdom suggests that swimming pools are a relatively inefficient use of water, but is this presumption supported by data? How much water does it take to maintain a swimming pool compared with a similarly sized area of turf grass? The purpose of this paper is to answer important questions about swimming pool and irrigated landscape water use and will compare demands in homes with and without swimming pools and with and without automatic sprinkler systems.

Background

The mean annual water use, based on historic billing records analysis, for the 12 combined study sites in the REUWS was 146,000 gallons per household per year with a standard deviation of 103,500 gallons. Across all study sites 42 percent, or 62,000 gallons of the annual use was for indoor purposes and 58 percent, or 84,000 gallons for outdoor purposes. In areas with hot climates such as in study sites Phoenix, Tempe and Scottsdale, the percentage of outdoor use was higher, in the range of 59 to 67 percent, while areas with typically cooler climates had lower outdoor water use percentages in the range of 22 to 38 percent. (Mayer et. al., 1999)

Daily Per Capita Water Use

The mean per capita indoor daily water use in the REUWS was 69.3 gallons and outdoor daily use was 100.3 gallons per capita across all 1,188 homes in 12 study sites as shown in Figure 1.

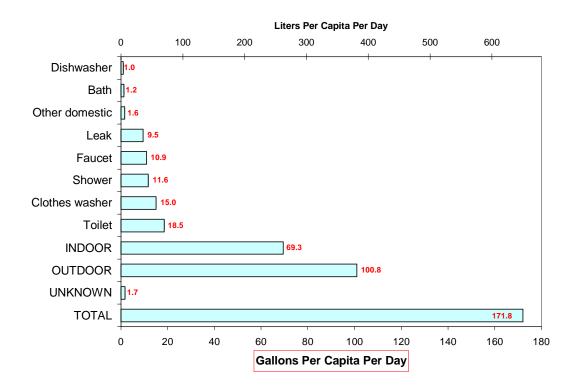


Figure 1: Mean daily per capita water use, from 12 REUWS sites¹

Factors Affecting Outdoor Water Use

Some of the most important variables that affect landscape water use are:

- The amount and frequency of rainfall during the growing season
- Length of growing season
- Area of landscape/garden
- Type and amount of plant material
- Extent and root depth of turf grass
- Consumptive use requirements of the plant material (which is a function of evapotranspiration)
- Soil type
- Amount of shade
- Wind
- Method of irrigation (hose and sprinkler, in-ground sprinkler system, drip, bubbler, etc.)
- Efficiency of application method(s) (frequent adjustment of time clocks to "track" evapotranspiration, rain shut-off devices, etc.)
- General horticulture (particularly turfgrass horticulture) and maintenance practices

¹ Source: Residential End Uses of Water Study, AWWA Research Foundation, 1999.

Some of the most important variables that affect swimming pool water use are:

- Surface area of pool for evaporation
- Daily and seasonal climate variations (temperature, wind, etc.)
- Covering of the pool and type of cover (bubble wrap, insulated, etc.)
- Amount of use (splashing)
- Maintenance (backwashing, flushing of solar heating system)
- Frequency of refilling

Factors vary widely from individual home site to home site, and it is not practical to accurately quantify each single family detached home use for different regions of the country. However, some general trends can be seen as illustrated in the following discussion.

REUWS Data Analysis

To evaluate the impact of swimming pools and automatic sprinkler systems on residential water use, the extensive database from the REUWS was accessed. This database includes information on annual water use, outdoor water use, irrigable area, and detailed survey responses from a sample of 1,188 homes in 14 cities in the U.S. and Canada. A summary of the data extracted from this data set is shown in Table 1. There were a total of 194 homes with swimming pools and 1,129 homes for which irrigable area data were available.

Table 1: Outdoor use, application rate, and swimming pools – REUWS sites

Study City	# of	Avg.	Avg.	Avg.	Net ET	# of
	Homes	Irrigable	Annual	Application	for Turf	Swimming
	in	Area	Outdoor	Rate	Grass	Pools
	Sample	(sf)	Use	(inches)	(inches)	
			(kgal)			
Cambridge, Ontario	54	6998	7.8	3.1	15.7	6
Waterloo, Ontario	35	5951	7.8	2.9	15.7	4
Seattle, WA	74	6058	21.7	7.7	26.4	1
Tampa, FL	99	12361	30.5	6.3	26.0	21
Lompoc, CA	100	4696	39.9	14.9	35.5	0
Eugene, OR	93	6863	46.7	16.9	23.7	2
Boulder, CO	100	6512	72.9	16.7	30.2	1
San Diego, CA	94	5904	99.3	33.1	44.0	9
Tempe, AZ	39	7341	100.3	47.5	72.5	18
Denver, CO	99	7726	104.7	28.3	33.4	1
Walnut Valley WD	98	10282	114.8	27.4	67.1	23
Scottsdale, AZ	60	4968	156.5	34.9	72.5	28
Phoenix, AZ	93	9075	161.9	38.6	73.4	32
Las Virgenes MWD	91	16306	213.2	36.0	48.1	48

Water Use With and Without a Swimming Pool

The best way to compare outdoor water use in homes with and without swimming pools and automatic sprinkler systems is to examine the average annual application rate of water in these groups. The application rate is simply the total outdoor water use (from annual billing data) divided by the irrigable area. By comparing application rate rather than annual outdoor use, the impact of varying landscape sizes is controlled.

Table 2 shows a comparison of the application rate at homes from the REUWS with and without swimming pools. There were also 83 homes that did not respond to the question. It is suspected that most of these non-respondent households do not have swimming pools. Households with swimming pools used substantially more water outdoor that houses without swimming pools. Households with pools applied 35.3 inches of water compared to 20.5 inches for households without pools – a 72.2% difference.

Table 2: Application rate of homes with and without swimming pools

House Category	Count	Mean Application Rate	Std. Deviation	Std. Error
		(inches)		
No Swimming Pool	852	20.5	24.6	0.84
Swimming Pool	194	35.3	28.9	2.07
Non-Response	83	19.9	26.1	2.87

Swimming Pools vs. Automatic Sprinkler Systems

An important consideration for this research is the impact of automatic sprinkler systems on water use. This information is also available from the REUWS database.² How do automatic sprinkler systems impact water use compared to or along with swimming pools. Results of this analysis are shown in Table 3.

Table 3: Application rate in homes with and without pools and auto sprinklers

Swimming	Auto	Count	Mean	Std. Deviation	Std. Error
Pool?	Sprinkler		Application Rate		
	System?		(inches)		
No	No	503	14.0	17.3	0.77
Yes	No	63	19.6	19.1	2.40
NR	No	52	15.8	19.6	2.72
No	Yes	349	29.9	30.1	1.61
Yes	Yes	131	42.8	29.8	2.60
NR	Yes	31	26.8	33.6	6.04

² Homes with an automatic irrigation system in either their front or backyard (or both) were included in this category.

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In this analysis it can be seen that automatic sprinkler systems increase outdoor water use more substantially than swimming pools. The 503 homes without a swimming pool or an automatic sprinkler applied an average of 14.0 inches of water per year. The 63 homes with a swimming pool, but not an automatic sprinkler applied 19.6 inches of water per year. The 349 homes without a swimming pool, but with an automatic sprinkler applied 29.9 inches of water per year. From this analysis, adding a swimming pool increases outdoor use by 40%, but adding an automatic sprinkler system increases outdoor use by 114%.

Climate Zones and Water Use

To account for seasonal variations, this analysis was repeated after first separating houses in high irrigation climates and low irrigation climates. A total of 774 homes from Boulder, Denver, San Diego, Phoenix, Tempe, Scottsdale, Walnut Valley, Las Virgenes, and Lompoc were included in the high irrigation group. A total of 355 homes from Eugene, Seattle, Tampa, Cambridge, and Waterloo were included in the low irrigation group. There were 160 homes (20.7%) with swimming pools in the high irrigation group and 34 homes (9.6%) in the low irrigation group.

The analysis that compares the impact of swimming pools and automatic sprinkler systems was repeated for both of these groups of homes. Results from the high irrigation group are shown in Table 4 and from the low irrigation group are shown in Table 5.

Table 4: High irrigation group - application rate in homes with and without pools and auto sprinklers

Swimming	Auto	Count	Mean	Std. Deviation	Std. Error
Pool?	Sprinkler		Application Rate		
	System?		(inches)		
No	No	259	20.8	19.4	1.21
Yes	No	44	26.0	19.2	2.89
NR	No	30	22.7	23.1	4.21
No	Yes	298	33.4	30.8	1.78
Yes	Yes	116	45.4	29.4	2.73
NR	Yes	27	29.6	35.2	6.77

In the high irrigation group (Table 4), homes without a swimming pool or automatic irrigation system used an average of 20.8 inches of water per year. The addition of a swimming pool increased demand by 25% to 26.0 inches of water per year. The addition of an automatic sprinkler system increased demand 60.6% to 33.4 inches of water per year. Homes with both a swimming pool and an automatic sprinkler system used by far the most water – 45.4 inches per year.

In the low irrigation group (Table 5), homes without a swimming pool or automatic irrigation system used an average of 6.7 inches of water per year. In the 19 homes with a swimming pool but no auto sprinkler system, the average annual demand was 25% lower at 5.0 inches per year. The 51 homes that had an auto sprinkler system but no swimming pool used an average of 9.2 inches per year. The 15 homes with both a swimming pool and auto sprinkler used the most

water by far – an average of 22.5 inches – 236% more than homes without a pool or auto sprinkler system.

Table 5: Low irrigation group - application rate in homes with and without pools and auto sprinklers

Swimming Pool?	Auto Sprinkler System?	Count	Mean Application Rate (inches)	Std. Deviation	Std. Error
No	No	244	6.7	10.6	0.68
Yes	No	19	5.0	7.0	1.60
NR	No	22	6.4	6.1	1.30
No	Yes	51	9.2	12.4	1.73
Yes	Yes	15	22.5	25.6	6.62
NR	Yes	4	8.3	7.7	3.86

Theoretical Discussion & Estimates of Outdoor Water Use

To dive a little deeper into the general trends discussed above, one can explore possible means for estimating outdoor water end uses for both swimming pools and irrigated landscapes. The approximations presented below are for example and comparative purposes to gain additional insights into outdoor water use patterns for the water conservation planner.

Estimation of Water Use for Swimming Pools

A common sense approach to approximating water use from swimming pools considers the following:

- Summer peak evaporation
- Annual evaporation
- Splashing
- Leaks
- Refilling

Sample Calculations for Pool Water Use in Higher Irrigation Group(Sacramento, California)

Estimating swimming pool water use in Sacramento, California was performed using the peak summer evaporation rate of 13 inches of water per month and annual evaporation rate of 50 inches per year. (University of California, Davis (IPM Weather Database) http://www.ipm.ucdavis.edu/WEATHER/AVERAGES/davis.html, 2000) Annual evaporation from a swimming pool with total evaporative surface area of 800 ft² (dimension of 20 feet by 40 feet) was estimated as 25,000 gallons per year and 6,500 gallons per peak summer month in July. Splashing is assumed to account for 12-18 inches per year, approximately 5 inches per 3-summer month usage period, or 7,500 gallons per year (Nelson, 2000). Maintenance is estimated at 20 to

40 gallons per month or 360 gallons average per year. Leakage is negligible and refilling assumed to occur once every 7-10 years was also neglected (Sudduth, February 2000).³ Total annual swimming pool water use was estimated at 33,000 gallons per year or approximately 10,000 gallons per summer month in Sacramento, California.

Sample Calculations for Pool Water Use in Lower Irrigation Group (Tampa, Florida)

Identical methodology as used above was applied to estimate total annual swimming pool water use in Tampa, Florida, at 44,600 gallons per year or approximately 6,800 gallons per peak month. This estimate was determined given the peak evaporation rate in May of 8.5 inches of water per month and annual evaporation rate of 73.68 inches per 30-year annual average for the South Central Florida area. (Florida Climate Center, Tallahassee, Florida, 2001) Annual evaporation from a swimming pool with total evaporative surface area of 800 ft² was estimated as 36,740 gallons per year and 4,240 gallons per peak summer month.

Reducing Evaporation with Swimming Pool Covers

Modeled results for the Sacramento, California and Tampa, Florida locations indicate that evaporation can be reduces substantially if a swimming pool cover is use (US DOE, 2001). To analyze the benefits of swimming pool covers the United States Department of Energy developed a software package called "Energy Smart Pools". The DOE Institutional Conservation Program (ICP), RSPEC (Reduce Swimming Pool Energy Costs) is no longer funded, but the materials produced under the program are still available on their web site: http://www.eren.doe.gov/rspec/

Pool water consumption in Sacramento, California was estimated at 60,474 gallons per year assuming 15% wind speed and 30% shading during daylight hours. When using a manually operated pool cover, water evaporation savings of 17,089 gallons – a 28.2 percent reduction – were estimated. Holding all parameters in the model constant other than geographic location, water consumption in Tampa, Florida was estimated at 41,286 gallons per year. Savings due to reduced evaporation from a pool cover were approximated at 12,252 gallons per year, or 29.6 percent. The water consumption estimates are higher than previously calculated due to the addition of weather factors such as wind and shading.

Estimated Lawn Water Requirements in Warm Climate Group (Sacramento, California)

Both a "rule of thumb" basic method and a more involved method to estimate the annual water requirement for an irrigated landscape area are available on WaterWiser under Residential Water Use, Outdoor Use (Nelson, 1998).

The basic methodology was used to estimate the applied water requirement (AWR) for an irrigated lawn area of 800 square feet to be 27,200 gallons/year for warm season grasses and 39,000 gallons per year for cool season grasses under climatic conditions for Sacramento, California. This assumes a relatively high 50% irrigation system efficiency and 39.0 inches of

³ These assumptions are valid for Sacramento, but it should be noted that outdoor pools in regions that freeze in the winter generally must be drained.

water per year climatic factor. Peak summer water requirements were estimated at 6,000 gallons per month for warm season grasses and 8,500 gallons per month for cool season grasses with an 8.5 inches per month for climatic factor.

Estimated Lawn Water Requirements in Cool Climate Group (Tampa, Florida)

To compare with a geographic area of higher humidity and less irrigation requirements, the basic methodology was again used to estimate the AWR for an irrigated landscape in the vicinity of Tampa, Florida. Using a lawn area of 800 square feet to be 25,400 gallons/year for warm season grasses and 36,300 gallons per year for cool season grasses under relative cooler climatic conditions. This assumes a relatively high 50% irrigation system efficiency and 36.4 inches of water per year climatic factor.

Comparison of Water Use Estimates

Using calculations for evaporative losses under Sacramento area climatic conditions, it appears that swimming pools and irrigated lawn area use approximately the same amount of water on a square footage basis. If a homeowner were to remove turf grass and install a swimming pool, the water use for each square foot of grass replaced by pool water surface area would be approximately the same. This is primarily due to the direct evaporation from the pool's surface compared to the evapotranspiration of the grass and lack of efficiency in the lawn irrigation system (typically between only 30-50% efficient). A comparison of the annual water requirements on a square footage basis is presented in Table 6.

Table 6: Comparison of Estimated Lawn & Swimming Pool Annual Water Requirements

Type of Use	Estimated Annual Water Use				
	Sacramer	nto, California	Tampa, Florida		
	gal/ft ²	inches applied	gal/ft ²	inches applied	
Swimming Pool	41.3	66.3	55.8	89.5	
Irrigated Lawn Area – Cool					
Season Grasses	48.8	78.3	45.4	72.8	
Irrigated Lawn Area – Warm					
Season Grasses	34.0	54.5	31.8	51.0	

However, if comparison of swimming pool water use to irrigated lawn is based on landscape design of 1,500 square feet of irrigated lawn compared to 800 square feet of pool surface area and 600 square feet of decking, then irrigated lawn would have higher water use. Under this scenario, a homeowner's backyard with irrigated lawn can use 1.0 to more than 1.5 times as much water particularly if using an automatic timed irrigation system. When a pool cover is used, evaporation can be reduced by approximately 30%. Then the comparative difference in irrigated lawn water use is closer to 2.0 to 3.0 times more when combined with landscape design considerations.

Conclusions

The water conscious behavior of the homeowner is the principal factor in determining if the swimming pool or the irrigated lawn uses more water. A comparison of water use of swimming pools and irrigated landscape area was analyzed from information gathered from 1,129 homes in 14 locations in the United States and Canada as part of the REUWS. It was found that for the 194 homes with swimming pools, the addition of a swimming pool increased demand between 22 to 25 percent. The addition of an automatic sprinkler system increased demand between 54.9 to 60.6 percent. Homes with both a swimming pool and an automatic sprinkler system used the most water. Water use estimates for a typical home in Sacramento, California, show that swimming pools and irrigated lawn area use approximately the same amount of water on a square footage basis. In other words, if a homeowner in this region were to remove turf grass and install a swimming pool, the water use for each square foot of grass replaced by pool water surface area would be approximately the same.

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APPENDIX A

Recommendations for Swimming Pool and Irrigated Landscape Water Use

Some general guidelines for water savings associated with swimming pools include:

• Channel splashed-out pool water into landscaping.

- Lower pool water if necessary to reduce excessive splashing.
- Use a pool cover to reduce evaporation when pool is not being used. Also helps keep pool clean, which reduces frequency of cleaning pool filters, and need to add chemicals.
- If purchasing a diatomaceous earth (DE) or sand pool filter, include a water recovery system that saves 20-50 gallons of water by cleaning and recycling backwash water to the pool.
- If cleaning a cartridge-type pool filter, use a hose sprayer to clean cartridges and do not leave the hose running continuously.

Some general guidelines taken from the WaterWiser web page related to lawn irrigation includes:

- As much as 30% of water can be lost to evaporation by watering the lawn during midday.
- Homes with in-ground sprinkler systems use 35% more water outdoors than those who do not have an in-ground system. One reason may be that system controllers are not adjusted according to seasonal irrigation needs.
- Water before 8 A.M. or after 6 P.M. and avoid watering on windy days.
- Water in several short sessions rather than one long one. For example, three ten minute sessions spaced 30 minutes to an hour apart will allow your lawn to better absorb moisture than one straight 30 minute session.
- Only water when your lawn is thirsty. Over watering promotes shallow root growth making your lawn less hardy. (To determine if your lawn needs be watered, simply walk across the grass. If you leave footprints, it's time to water.)
- Install moisture sensors in each irrigation zone (sunny, shady, etc.) to better determine irrigation needs.
- Check sprinkler system valves periodically for leaks and keep the heads in good repair.
- Adjust the timer on automatic sprinklers according to seasonal water demands and weather conditions.
- Install a rain shut-off device on automatic sprinklers to eliminate unneeded applications.
- Make sure your sprinkler is placed so it only waters the lawn, not the pavement.
- Avoid sprinklers that spray a fine mist, which increases evaporation.

Drip irrigation

• Install a drip irrigation system for watering gardens, trees and shrubs. Drip irrigation provides a slow, steady trickle of water to plants at their roots through a network of hidden pipes and hoses. The systems are regulated by a controller that can be adjusted for different levels of watering according to the needs of the plants. Drip irrigation systems reduce overwatering, inefficient watering, weed growth, and the time and labor involved in hand watering.

Web site Resources

Although homeowners should contact their water agency to check on water retrofit kits and water audit programs being offered at no or minimal cost, a web site for water efficiency products is: http://store.yahoo.com/cottonswow/watefprod.html

For direct web links to water conservation tips for homeowners, please review the following web sites.

http://www.monolake.org/socalwater/wctips.htm

http://www.getwise.org/wwise/index.html

http://www.americanwater.com/49ways.htm

http://www.r5.pswfs.gov/inyo/vvc/mono/wtrislif.htm

http://www.waterwiser.org/

Some additional water conservation related web sites that may be useful links include:

Water Education Foundation http://www.water-ed.org/

US Water News http://www.uswaternews.com/homepage.html

US Department of Energy http://www.eren.doe.gov/

Center of Excellence for Sustainable Development http://www.sustainable.doe.gov/efficiency/weinfo.htm

California Urban Water Conservation Council http://www.cuwcc.org

Aquacraft, Inc. Water Engineering and Management www.aquacraft.com

APPENDIX E

American River Pump Station Project Record of Decision, September 2002 and Board of Director's Minutes, July 11, 2002

RECORD OF DECISION

AMERICAN RIVER PUMP STATION PROJECT

September 2002

Concur:	
/s/ Frank Michny	Date: 9/24/02
Frank Michny	
Regional Environmental Officer	
Approved:	
/s/ Susan L. Ramos for Kirk C. Rodgers	Date: <u>10/4/02</u>
Regional Director	

Department of the Interior Bureau of Reclamation Mid-Pacific Region Sacramento, California

I. INTRODUCTION

This document constitutes the Record of Decision of the Department of the Interior, Bureau of Reclamation (Reclamation), Mid-Pacific Region, regarding the preferred alternative for the American River Pump Station Project (Project) located on the North Fork American River east of the City of Auburn, California. The Project is the subject of the Final Environmental Impact Statement/Environmental Impact Report (FEIS/EIR), American River Pump Station Project, dated July 2002, developed in compliance with the National Environmental Policy Act (NEPA), and the California Environmental Quality Act (CEQA).

The FEIS/EIR was prepared jointly by Reclamation and the Placer County Water Agency (PCWA). The Project consists of: (1) construction and operation of a year-round pumping facility for PCWA that would divert water from the North Fork American River in the vicinity of the Auburn Dam construction site; (2) closure of the Auburn Dam bypass tunnel; and (3) restoration of the three-quarter mile reach of the river that was dewatered and otherwise impacted by activities associated with Auburn Dam construction and associated access features for the safety of the using public. The EIS/EIR addresses the direct and indirect impacts of three alternatives as well as cumulative impacts associated with increased use of water from the American River, and regional service area impacts.

The purpose of the Project is threefold: (1) to provide facilities to allow PCWA to convey its Middle Fork Project (MFP) water entitlement to the Auburn Ravine Tunnel to meet demands within its service area; (2) to eliminate the safety issue associated with the Auburn Dam bypass tunnel; and (3) to allow for all pre-construction beneficial uses of water in what is now the dewatered river channel, including recreation, navigation, and other instream beneficial uses.

Prior to the onset of construction, Reclamation and PCWA would approve and execute Contract No. 02-LC-20-7790, entitled "Contract Between the United States and Placer County Water Agency Related to American River Pumping Plant and Associated Facilities" (Contract). Reclamation would construct the Project facilities, and pursuant to the Contract, transfer the ownership of the pump station and appurtenances to PCWA for operation and maintenance. Under the Contract, design of the Project facilities must be approved by PCWA.

Decisions and actions related to closure of the Auburn Dam bypass tunnel, restoration of the historic American River channel and any related recreation management actions would be undertaken by Reclamation and by California Department of Parks and Recreation (CDPR), which manages the lands under a cooperative agreement with Reclamation, as part of the Auburn State Recreation Area.

On July 11, 2002, the PCWA Board of Directors certified the Final EIR pursuant to CEQA, adopted various findings required by CEQA, approved the Contract, and approved Design Specifications for the pumping facility. On July 12, 2002, PCWA then

filed a notice of determination pursuant to CEQA. On August 1, 2002, PCWA rescinded its approvals of the Contract and Design Specifications, took new public testimony, and ultimately adopted new findings and re-approved the Contract and Design Specifications. A new NOD was filed on August 2, 2002.

II. DECISION

The decision is to implement the Proposed Project, identified and discussed in the FEIS/EIR as the Mid-Channel Diversion Alternative.

III. BACKGROUND

In 1965, Congress authorized the construction of Auburn Dam on the North Fork American River near the City of Auburn. Construction began in 1967 and included a cofferdam, a tunnel through a ridge to bypass the river around the construction area (referred to as the bypass tunnel), excavation for the Auburn Dam foundation, and removal of a permanent pump station owned by PCWA. Although The Auburn Dam continues to be a Congressionally authorized construction project, construction has been suspended.

Prior to the initiation of construction of Auburn Dam, PCWA built a 50 cubic feet per second (cfs) pump station on the North Fork American River to convey PCWA water supplies from its MFP to the Auburn Ravine Tunnel for delivery to its service area. However, before PCWA's operations began, the pump station was removed by Reclamation to facilitate construction of Auburn Dam. Pursuant to a Land Purchase Agreement with PCWA described below, Reclamation has since installed a seasonal pump station annually as needed by PCWA to meet water supply demands.

In 1972, PCWA entered into a Land Purchase Agreement with Reclamation under the threat of condemnation. As part of the Land Purchase Agreement, PC WA's 50 cfs pump station was removed to facilitate construction of Auburn Dam subject to Reclamation s provision of an interim pumping facility or alternative water supply until Auburn Dam was completed. As the Auburn Dam Project was designed at that time, water from the reservoir was to flow by gravity into the Auburn Ravine Tunnel to provide PCWA its water entitlements, thereby eliminating the need for a pump station. The Land Purchase Agreement obligated Reclamation to deliver up to 25,000 acre-feet annually (AFA) at a rate of up to 50 cfs.

Pursuant to the Land Purchase Agreement, Reclamation has delivered water through the installation and removal of a seasonal pump station on an as-needed basis. The first time PCWA required access to its MFP water rights to meet system demands was during the drought of 1977. In response to PCWAs request for water under the Land Purchase Agreement, Reclamation constructed a pump station capable of delivering approximately 50 cfs using pumps salvaged from PC WA's original pump station.

Beginning in 1990, PCWA has required access to its MFP water annually to meet its system demands under a variety of operating conditions. Reclamation has responded with RECORD OF DECISION—AMERICAN RIVER PUMP STATION; September 2002

the seasonal re-installation and removal of PCWA's original pumps at the same location as the 1977 installation. Due to the location of the installation, the pumps have to be removed before winter each year to prevent damage due to inundation from high river flows.

The seasonal pumps do not fully meet PCWA's water supply requirements, are not reliable, and have become increasingly expensive to install and maintain. Reclamation can deliver the MFP water supply to PCWA only from approximately April to November. Late-fall, winter, and spring MFP water supplies are not accessible due to the potential for high river flows that can inundate the seasonal pump station. Further, because of limitations on the pumping capacity of the existing facilities (50 cfs) and the timing of seasonal diversions as compared to the pattern of demands, the maximum annual diversion for the seasonal pump station is approximately 19,300 acre-feet (AF). The seasonal pump station no longer permits Reclamation to provide PCWA with a reliable water supply when and where required to meet PCWA's system demands in accordance with the Land Purchase Agreement.

The annual installation and removal of the seasonal pump station has become increasingly expensive for Reclamation. In recent years, the minimum cost for annual installation and removal has been approximately \$250,000. The record high flows of the American River during January 1997 destroyed both the access road to the seasonal pump station and the pipeline connecting the pumps to the Auburn Ravine Tunnel. Reinstallation of the seasonal pump station in the summer of 1997 required new foundation work for the access roads and the pipeline, costing Reclamation nearly \$1 million.

Auburn Dam remains an authorized federal project. In 1992 and 1996, there were unsuccessful Congressional initiatives to modify and restart the Auburn Dam Project. Since the decision to enter into no new construction contracts was reached in 1977, Reclamation has been managing the Auburn Dam site on an interim basis. Existing site conditions present Reclamation with several resource management issues and opportunities, including public safety, access, and recreation management. In 1994, Reclamation undertook a study to address these issues, together with the installation of a year-round pump station for PCWA. In 1996, the results were published in a report entitled *Preliminary Concept Plan*, *Restoration and Management of the Auburn Dam Site* (Concept Plan).

Reclamation's Concept Plan identified several interests and options related to improving public safety, access, and recreation at the Auburn Dam construction site. The options identified included closure of the bypass tunnel, restoration of the river through the dewatered channel, and recreational access at the site. Upon completion of the 1996 Concept Plan, Reclamation initiated a concerted engineering and environmental planning effort to implement the findings of the report.

Early in the planning effort, members of the public and certain interest groups supported inclusion of the 1996 Concept Plan site restoration and river bypass tunnel closure measures. In late 1997, Reclamation (1997) undertook a Value Planning Study to further evaluate the options for a year-round pump station, restoration of the Auburn Dam

construction site, and tunnel safety consistent with the 1996 Concept Report. However, following publication of the results of the 1997 study, it appeared that critical Congressional support for the project would not be forthcoming if the project included blocking the bypass tunnel or restoring the river channel. Therefore, during 1998 and into 1999, Reclamation and PCWA concentrated on designing a pump station that would not require the bypass tunnel to be closed or the channel restored.

In September 1999, the State of California's Attorney General sent the Secretary of the Interior a letter indicating legal obligations by the United States to close the diversion tunnel and restore the American River to its natural channel. In March 2000, Reclamation replied that it was ready to address the issues of tunnel closure and river restoration and was willing to enter into a more formal partnership with California to explore alternatives. The Attorney General responded affirmatively and Reclamation and the state entered into a Memorandum of Agreement (MOA) in January 2001.

The MOA obligated the state to provide funding towards the work needed to complete the EIS/EIR and design plans and specifications in connection with efforts to restore the dewatered portion of the North Fork American River. The MOA also obligated Reclamation to include incidental public access to the river in the vicinity of the Auburn Dam construction site for public health and safety, resource protection and emergency purposes, and any other purposes necessary as a foreseeable result to returning water to the dewatered portion of the river under the Proposed Project. Reclamation's agreement with CDPR for management of the Auburn State Recreation Area (Auburn SRA) would be updated to reflect responsibilities associated with river access at the Auburn site and at Oregon Bar.

IV. ALTERNATIVES CONSIDERED

The Proposed Project, as described in the FEIS/FEIR, includes independent but related actions by Reclamation and PCWA, as well as subsequent management activities of CDPR. Reclamation would (1) close the Auburn Dam bypass tunnel and restore the dewatered American River channel so that it can function in a natural manner, (2) build diversion, intake and pumping facilities for PCWA that could operate year round to meet PC WA's seasonal and annual water demands, and (3) would provide minimal public safety and emergency access facilities to allow CDPR to manage the Project site for recreational purposes. PCWA would enter into the proposed Contract with Reclamation to accept future operation and maintenance of the pumping facilities upon their completion, and relieve Reclamation of the obligations of its current Land Purchase Contract upon transfer of pumping facilities to PCWA.

Major features of the Proposed Project include:

- Construction of a new pump station, intake structure and fish screen;
- Installation of water conveyance pipelines;

- Improvement and development of all-weather access roads for project construction and operation;
- Extension of power supply lines;
- Closure of the Auburn Dam construction bypass tunnel;
- Restoration of flow to the American River Channel; and
- Creation of public river access sites/safety features and related improvements at the Auburn Dam site and near Oregon Bar, which also include fire management and mitigation.

These features are described in further detail in the FEIS/EIR.

Upon completion of construction and testing of the pump station, Reclamation will transfer the ownership of the facilities to PCWA, in accordance with the Contract. In accordance with the Contract, PCWA will assume full responsibility for all operation, maintenance, and related activities associated with the pump station and operate such new facilities for the purpose of water supply. Reclamation will retain responsibility for all other operation and maintenance activities associated with the authorized Auburn Dam Project. The proposed contract is included in Appendix B of the FEIS/EIR.

In addition to the Proposed Project Alternative (also referred to as the "Mid-Channel Diversion Alternative"), the FEIS/FEIR evaluated two other alternatives: the "Upstream Diversion Alternative" and the "No-Action/No-Project Alternative."

The Upstream Diversion Alternative would site the diversion/intake structure upstream of the bypass tunnel inlet. Locating the diversion upstream of the bypass tunnel would not require channel restoration or tunnel closure. The project area would remain closed to the public, except for authorized designated trail use. No additional public access facilities would be developed. The pump station location and associated facilities would be the same as proposed for the Proposed Project.

Under the No-Action/No-Project Alternative, Reclamation would continue annual installation and removal of the seasonal pumps at the existing location and maintain responsibility for the operation and maintenance of the facilities. The seasonal pump station facility includes an inlet pipeline that draws water from a small sump pond approximately 750 feet upstream of the bypass tunnel inlet, four pump canisters (12.5 cfs capacity each), and 2,800 feet of steel pipeline placed above ground connecting the pump station to the Auburn Ravine Tunnel portal.

PCWA would rely upon operation of the seasonal pumps for its MFP water supply; however, within the next few years, PCWA would request that Reclamation install the pumps earlier in the year as PCWA customer demands and overall reliance on the pump

station increase. Because of the risk of flood, however, the pumps could be used only for eight months each year, at most.

The environmentally preferable alternative is the Mid-Channel Diversion alternative as described in the FEIS/EIR. This is the alternative that Reclamation will implement. Of the two action alternatives, the Mid-Channel alternative is the one that restores the dewatered section of the North Fork American River.

V. BASIS OF DECISION AND ISSUES EVALUATED

The Mid-Channel Diversion Alternative has been selected for the following reasons:

The Mid-Channel Alternative best meets all the project purposes.

- Provides facilities to allow PCWA to convey its MFP water entitlements to the Auburn Ravine Tunnel to meet demands within its service area.
- Eliminates the safety hazard associated with the Auburn Dam bypass tunnel.
- Restores the dewatered portion of the North Fork American River at the Auburn Dam bypass tunnel.

The Mid-Channel Alternative also has the following benefits:

- Restores PC WA's ability to divert its MFP water supply year-round.
- Provides a reliable, year-round diversion capacity of up to 100 cfs.
- Alleviates the public safety hazards from the Auburn Dam construction site.
- Opens the American River to water-based recreation from Highway 49 to Folsom Reservoir.
- Provides public safety river access at the Auburn Dam site and at Oregon Bar.
- Alleviates Reclamation's obligations to PCWA under the Land Purchase Agreement.
- Provides the potential to add future diversion capacity of 25 cfs for Georgetown

Divide Public Utility District and an additional 100 cfs for PCWA.

In addition, the Mid-Channel Alternative is the environmentally preferred alternative.

Although the Upstream Channel Alternative meets the project purpose and objectives associated with providing PCWA access to its MFP water entitlements, it does not meet the purposes and objectives associated with tunnel safety and river restoration. This RECORD OF DECISION AMERICAN RIVER PUMP STATION; September 2002

alternative has some environmental advantages, in that it would not bifurcate the Auburn-to-Cool trail, which currently provides an equestrian and trail linkage between Auburn and Cool, and since there would not be additional public access, it would not have potential impacts associated with the risk of fire, noise, traffic safety, littering, and illegal activities. Despite these advantages, however, the missed opportunity to restore the dry river bed and to address tunnel safety issues makes the Upstream Channel Alternative, on balance, environmentally inferior to the Mid-Channel Alternative.

The No Action/No Project Alternative would not provide the reliable, secure water supply that PCWA needs to meet seasonal and annual water demands within its service area, nor would it meet the tunnel safety and river restoration goals and objectives. Because there would not be additional public access, this alternative would not have the potential impacts associated with the risk of fire, noise, traffic safety, littering, and illegal activities. As with the Upstream Channel Alternative, however, the missed opportunity to restore the dry river bed and to address tunnel safety issues makes the No Action/No Project Alternative, on balance, environmentally inferior to the Mid-Channel Alternative.

Reclamation also gave very serious consideration to comments received on the draft and FEIS/EIR. The more significant issues raised included:

- Bifurcation of the Auburn-to-Cool trail.
- Potential effects of allowing vehicular access to the river including increased traffic, noise, vehicular emissions, and risk of pedestrian safety, fire, illegal activity, and littering. These comments also included suggested alternative access points on the El Dorado County side of the river and at Manhattan Bar.
- Potential effects on anadromous salmonids of more water from the American River being delivered to the Auburn Ravine watershed.

Reclamation believes that all reasonable actions have been incorporated into the Project to address the issues raised, including, but not limited to:

- PCWA modified its operations to avoid discharging additional water from the American River into Auburn Ravine in order to prevent the possibility of causing straying of anadromous salmonids.
- Vehicular access to the site will only be available when a kiosk at the entrance is staffed and there will be limited hours of operation.
- Parking, except for three American with Disabilities Act compliant spaces, will be limited to one 50-vehicle parking lot located at the old concrete batch plant. Once the parking area is full, no additional vehicles will be permitted to enter the area.

- The existing parking area outside the gate at the Maidu Drive entrance to the project area will be improved to further minimize the potential for recreation-related parking along Maidu Drive.
- Off-road vehicle use, alcohol use, open fires, and overnight camping/parking will be prohibited.
- A comprehensive fire management plan is being prepared. As part of this effort, a
 Fuels Management Action Plan and an Auburn State Recreation Area Pre-fire
 Management Plans have been completed. Implementation of the Fuels
 Management Action Plan is expected to be completed prior to opening the area to
 public use.
- Shaded fuel breaks will be established on public lands that interface private lands directly affected by the Project, along public access roads, and the parking area.
- The construction contractor will be required develop and implement an effective fire protection and prevention program.

Although the cooperation of the CDPR, who is under contract to manage the subject federal lands, will be necessary to fully implement several of these measures, CDPR staff has preliminarily indicated a willingness to cooperate and to implement the measures or actions within its control. Formal action by that agency has not yet occurred, however. As a "responsible agency" for purposes of the CEQA, CDPR could not take formal action until PCWA first certified the Final EIR, which happened just recently. CDPR is expected to take formal action within the near future.

VI. IMPLEMENTING THE DECISION AND ENVIRONMENTAL COMMITMENTS

Project planning, as described in the FEIS/EIR, included all practicable means of avoiding adverse environmental impacts. Where this was not possible, the Project sponsors have committed to the environmental mitigation actions described in the Mitigation Monitoring and Reporting Program/Environmental Commitment Plan which is included in the FEIS/EIR and is part of this Record of Decision, by reference. Mitigation activities will be coordinated with appropriate federal, state, and local agencies including the Fish and Wildlife Service (FWS), the National Marine Fisheries Service, U.S. Army Corps of Engineers, Office of Historic Preservation, CDPR, California Department of Fish and Game (CDFG), Regional Water Quality Control Board, State Water Resources Control Board, California Department of Forestry and Fire Protection, and Fire Safe Councils for the Auburn Dam and Reservoir Project Lands.

Following is a summary of mitigation measures adopted by Reclamation that are identified in the Mitigation Monitoring and Reporting Program/Environmental Commitments Plan:

RECORD OF DECISION—AMERICAN RIVER PUMP STATION; September 2002

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Design Activities

- Blend project features with surrounding landscape.
- Minimize noise by enclosing the pumps. Construction Activities
- Establish buffer zone to avoid disturbance of and prevent the permanent loss of riparian, wetland and pond vegetation and associated habitat.
- Minimize impacts upon state and federal special-status species in the project area.
- Initiate measures for entrapped, injured, or dead special-status species.
- Remove all construction material, litter and debris from the site.
- Institute water quality protection measures.
- Maintain public recreation trail access.
- Avoid trail closures that affect the Western States Endurance Run, Tevis Cup Western States Trail Ride, and the American River 50-mile Endurance Run.
- Stop construction activity if cultural resources or human remains are uncovered.
- Develop and implement a construction traffic access management plan that, among other things, requires construction personnel and supply deliveries to limit use of Maidu Drive during peak school-related travel times.
- Minimize ozone precursor emissions.
- Minimize PM₁₀ emissions.
- Minimize potential for disturbance of asbestos and exposure of construction personnel or the public.
- Minimize noise.
- Minimize the risk of public exposure to fire hazards.
- Minimize the potential for increased erosion and slope instability.
- Minimize the potential for increased exposure to hazardous materials or fire risk.

Post-construction Activities

- Prevent fish entrainment and impingement at the water supply intake/point of diversion.
- Restore permanent riparian, wetland, and pond vegetation/habitat loss.
- Minimize water quality impacts associated with increased public access.
- Minimize trail user conflicts due to increased public access.
- Minimize littering at public river access points.
- Provide disabled access parking area.
- Develop and implement a programmatic agreement with the State Historic Preservation Officer regarding potential incremental impacts at Shasta Reservoir.
- Provide information regarding new public river access.
- Minimize the risk of public exposure to fire hazards.
- Prevent vehicular access in undesignated areas.

The National Marine Fisheries Service found that the Project is not likely to adversely affect the Sacramento River winter-run chinook salmon, Central Valley spring-run chinook salmon, Central Valley steelhead, and their critical habitat provided that the reasonable and prudent measures as defined in the CVP and SWP Operations (OCAP) Biological Opinion for winter-run chinook salmon and the interim OCAP Biological Opinion for Central Valley spring-run chinook salmon and Central Valley steelhead are adhered to. The National Marine Fisheries Service also stated that the Project would not adversely affect essential fish habitat for Pacific salmon.

FWS has concurred that the Project may affect but will not likely adversely affect federally listed threatened or endangered species within its jurisdiction.

Reclamation received a Fish and Wildlife Coordination Act report from the FWS. As stated in Section VI of this Record of Decision, Reclamation will coordinate with the FWS to implement all appropriate recommendations in the report, as much as possible, for all project implementation activities.

FWS has provided a planning aid memorandum regarding the cumulative impact analysis in accordance with the Fish and Wildlife Coordination Act. FWS recommended and Reclamation agrees to do the following:

- Keep the FWS informed of new information regarding the Project;
- Utilize the American River Operations Work Group to assess the probability, extent, intensity, and mitigation of short-term adverse conditions in the lower American River;
- Improve the definition of impact thresholds in future water supply planning studies;
- Provide further data and analysis to support conclusions regarding the significance of impacts on important water quality and flow parameters in future studies; and
- Provide further rationale to support conclusions on the significance of impacts where the analysis is subjective in future studies.

FWS recommended that Reclamation prepare a programmatic EIS for the American River-related foreseeable actions and develop a programmatic record of decision. Reclamation is not the lead agency for many of the foreseeable American River actions, and thus does not believe it appropriate to complete a NEPA document addressing actions of others. In addition, Reclamation believes the comprehensive cumulative impact analysis, which is the subject of this planning aid letter, provides the information necessary for Reclamation decision makers to understand the impacts of their decisions as they relate to actions in the American River basin.

FWS recommended that Reclamation develop a water resources management plan for the American River basin based on a programmatic EIS and programmatic record of decision. Reclamation believes that basin planning can best be done by local interests, such as the Water Forum and the Lower American River Task Force, which have recently completed a River Corridor Management Plan. Reclamation is a major contributor to the implementation of that plan as it relates to protecting fish and wildlife in and along the lower American River. We do not believe that a more formal commitment would change our contribution to that, and other efforts.

FWS recommended that Reclamation develop a mitigation plan that considers needs for mitigation of historical and present CVP impacts, then considers mitigation needs for new impacts of the American River-related reasonably foreseeable actions. Reclamation and FWS have developed such a plan pursuant to Central Valley Project Improvement Act and both agencies are presently implementing that plan. Regarding impacts of future actions, some are being mitigated prior to the actions taking place (such as the temperature control device on Folsom Dam's municipal and industrial supply intake and participation in implementation of habitat conservation plans) and others as the actions are approved and implemented (such as water districts agreeing to not serve water to new developments until the developer gets any necessary approvals from the FWS).

Lastly, FWS recommended that Reclamation enter into discussions with the FWS to develop an ecosystem-based programmatic ESA consultation on the group of American River-related reasonably foreseeable actions. Reclamation and FWS have had such discussions in the past and Reclamation has elected not to proceed with such a programmatic consultation due primarily to the staggered timing of American River actions, the fact that many actions are not well defined as to terrestrial activities and possible effects, and the fact that many actions in the American River basin are locally driven. Reclamation will continue to consult on its actions as they are developed and may revisit the concept of a programmatic consultation if circumstances are shown to warrant such an approach.

VII. COMMENTS RECEIVED ON THE FEIR/EIS

Comments received on the FEIR/EIS generally relate to the following issues.

Public Vehicular Access to the River and Risk of Fire

Several letters were received regarding public vehicular access to the river and the perceived additional risk of fire associated with the access. There were letters both opposing the access and supporting it. Issues raised were the same as those raised in comments on the DEIS/EIR, and those issues were addressed in the FEIS/EIR.

Adequacy of the FEIS/EIR Related to Mitigation for Bifurcation of the Auburn to Cool Trail An e-mail from the Action Coalition of Equestrians alleged that the FEIR is significantly flawed by it's omission of a legally enforceable monitoring and mitigation plan which addresses the specific crossings of the American River by users of the Auburn-to-Cool trail. The crossing issue was extensively addressed in the FEIS/EIR, and CDPR has initiated a program to address it.

Adequacy of the FEIS/EIR Related to Impacts on Steelhead in Auburn Ravine A letter from the Ophir Area Property Owners Association, Inc. made several allegations that the FEIS/EIR inadequately addressed impacts to steelhead in Auburn Ravine. Issues related to what the commenter alleged was an inadequate baseline, the possibility of non-native steelhead from the American River/Nimbus Fish Hatchery straying into Auburn Ravine, indirect and cumulative impacts related to the project, the alleged lack of adequate mitigation and alternatives, and the extent of the public participation process. These issues were extensively addressed in the FEIS/EIR. In addition, PCWA modified its operations to mitigate for impacts associated with the diversion of additional American River water directly into Auburn Ravine. In concluding that these comments lack merit, Reclamation is relying not only on its consultants who prepared the document, but on the NMFS and CDFG, the agencies that have jurisdiction over steelhead. Those agencies believe that the analysis is complete and adequate, and generally do not agree with the allegations in the letter. The NMFS finding, of no adverse effect on any listed species under their jurisdiction, reinforces Reclamation's conclusion that the FEIS/EIR fully meets the requirements of NEPA.

MINUTES

BOARD OF DIRECTORS PLACER COUNTY WATER AGENCY

Thursday, July 11, 2002 7:00 p.m. ADJOURNED MEETING

A. CALL TO ORDER

Chair Jarvis called the adjourned meeting of the Placer County Water Agency to order at 7:05 p.m. in the Board of Supervisors Chambers, Placer County Administrative Center, 175 Fulweiler Avenue, Auburn, California. Director Roccucci led the Pledge of Allegiance.

Board Directors present: Alex Ferreira, Mike Lee, Pauline Roccucci, Otis Wollan, and Chair

Lowell Jarvis.

Board Directors absent: None.

Agency Personnel present: DAVE BRENINGER, General Manager; JAN GOLDSMITH, General

Counsel; KATHLEEN SMITH, Clerk to the Board; EINAR MAISCH, Director of Strategic Affairs; DON REIGHLEY, Director of Technical

Services; and BRENT SMITH, Engineer III.

Others present: Jim Micheaels, California State Parks and Recreation; Rod Hall, United

States, Department of the Interior, Bureau of Reclamation.

B. <u>PUBLIC COMMENT</u>

Steven Proe, El Dorado County Taxpayers for Quality Growth opined that the description for agenda item # G.1 states a preconceived action of the Board of Directors. General Counsel responded that she did not agree.

Other members of the public approached the podium at this time to comment on the American River Pump Station Project. The Chair requested they hold their comments until such time the matter is presented by staff and considered by the Board.

C. <u>DEPARTMENT HEAD REPORTS / AGENDA REVIEW & APPROV</u>AL: None.

D. <u>GENERAL ITEMS</u>

- 1. Considering the Final Environmental Impact Report (EIR) for the American River Pump Station Project as follows:
 - a) Considering whether the final EIR complies with the California Environmental Quality Act and reflects the Agency's independent judgment; and
 - b) Adopting Resolution No. 02 ___ Certifying that the Final EIR for the American River Pump Station Project complies with the California Environmental Quality Act and reflects the Agency's independent judgment, and that the Agency Board of Directors has reviewed and considered the information in the Final EIR.

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Einar Maisch, PCWA Director of Strategic Affairs provided an historical background of the Agency's involvement in the American River Canyon. Legal overview of the process, scope of actions to be considered by the Board of Directors, and the roles of the participants were provided by Jan Goldsmith, General Counsel for the Agency. Legal summary of the National Environmental Policy Act/California Environmental Quality Act process was provided by Jim Moose, Special Counsel. Description of the American River Pump Station Project improvements was provided by Wayne Dahl, Montgomery Watson Harza and Rick McLaughlin and John Anderson, McLaughlin Water Engineers. Description of the use of the water and planned operating limitations was provided by Brent Smith, Agency Engineer. Paul Bratovich and Tami Mihm, Surface Water Resources, Inc. summarized the final Environmental Impact Report and proposed mitigation measures.

Chair Jarvis opened the public comment period at 8:40 p.m. and specified a time limit of five minutes per speaker. Oral comments on all agendized action items were received at this time. The following persons presented oral comments:

Ron Otto, Ophir Property Owners Association; Karen Clay; Lou Ann Hammond, Auburn; Liza Clark; Ben Troia, Skyridge Residents for Safety; Kevin Dimmick; Jerry Wilfley, Auburn; Ron Pinnick, Auburn; Phil Bearry, Robie Point resident; Kevin Hanley, Auburn; Charles Casey, Friends of the River; Steve Hiatt, Auburn; Steven Proe, El Dorado County Taxpayers for Quality Growth; Gordon Ainsleigh; Tim Woodall, Protect American River Canyon; Art Krueger, 11270 Wisteria Way, Auburn; Al Clark, 1492 Stone Way, Auburn; Richard Sanborn, 135 Midway Avenue, Auburn; Peggy Egli, 313 Riverview Drive, Auburn; Suzanne Ferroggiaro, 9270 Oak Leaf Way, Granite Bay; Terry Davis, Sierra Club; Nate Rangel, Loomis; Donna Williams, 4170 Auburn Folsom Road, Loomis; Ken Nittler, South Auburn for River Access; Bob Snyder, 100 Marina Avenue, Auburn; Tom Gullett, 11215 Mira Loma Drive, Auburn; Tim Lasko, 701 Gibson Drive, Roseville; Ed McIntosh, 1162 Humbug Way, Auburn; David Ryan, 11155 Rosemary Drive, Auburn; Beverly Harrington, 10045 Snowy Owl Way, Auburn; Bert Lefty, 1364 South Dowd, Lincoln; Janet Peterson, 1680 Ponderosa, Colfax; and John Mark, 395 Riverview Drive, Auburn.

Comments were also received from Jim Micheaels, Department of Parks and Recreation. Written comments submitted to the Board prior to the meeting were summarized by General Counsel. Further comments were solicited from staff and consultants, in response to the public comments. Discussion and inquiry by the Board followed. Director Ferreira moved adoption of **Resolution No. 02-20** certifying that the Final EIR for the American River Pump Station Project complies with the California Environmental Quality Act and reflects the Agency's independent judgment, and that the Agency Board of Directors has reviewed and considered the information in the Final EIR. The motion was seconded by Director Wollan and adopted by unanimous vote of directors present on roll call.

2. Considering American River Pump Station Project agreement with Bureau of Reclamation., including approval of Agreement Between United States, Department of the Interior, Bureau of Reclamation and Placer County Water Agency as it relates to the American River Pumping Plant and Associated Facilities. Such action shall include the adoption of Findings of Fact, a Mitigation Monitoring Plan, and a Statement of Overriding Considerations prepared pursuant to the California Environmental Quality Act.

Public comment on this item was included in the public comment period described under D-1 above. Director Lee moved the adoption of **Resolution No. 02-21** Making Findings and Statement of Overriding Considerations Concerning the American River Pump Station Project, Adopting the Mitigation Monitoring Program, and Approving Contract 02-LC-20-7790 with the United States Bureau of

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Reclamation. The motion was seconded by Director Roccucci and adopted by unanimous vote of directors present on roll call.

3. Considering American River Pump Station Project construction plans and specification, including approving, disapproving, or modifying the American River Pump Station Construction Plans and Specifications for construction of Phase I of the improvements. Such action shall include readopting the previously-approved Findings of Fact, a Mitigation Monitoring Plan, and a Statement of Overriding considerations prepared pursuant to the California Environmental Quality Act.

Public comment on this item was included in the public comment period described under D-1 above. Director Roccucci moved adoption of **Resolution No. 02-22** Approving Drawings and Specifications for Phase I of the American River Pump Station and Authorizing the Director of Technical Services to Approve Necessary Changes Thereto, and readopting the previously-approved Findings of Fact, a Mitigation Monitoring Plan, and a Statement of Overriding considerations prepared pursuant to the California Environmental Quality Act. The motion was seconded by Director Ferreira and adopted by unanimous vote of directors present on roll call.

- E. REPORTS BY DIRECTORS, GENERAL COUNSEL, AND GENERAL MANAGER
- F. ADJOURNMENT

Meeting adjourned at 11:48 p.m.

ATTEST:

KATHLEEN A. SMITH, Clerk to the Board Of Directors, Placer County Water Agency

APPENDIX F

Letter of Support

5620 Birdcage Street Suite 180 Citrus Heights, CA 95610 Tel: (916) 967-7692 Fax: (916) 967-7322 www.regionalwaterauthority.net



December 2, 2002

California Department of Water Resources Office of Water Use Efficiency P.O. Box 942836 Sacramento, CA 94236-0001 Attention: Ms. Marsha Prillwitz

Dear Ms. Prillwitz:

I am writing in support of the Placer County Water Agency's (PCW A) grant proposals to the Department of Water Resources under the 2002 Urban Water Conservation Grant Solicitation.

The Regional Water Authority (RW A) is a joint powers authority of 17 water suppliers serving more than 1.2 million people in the greater Sacramento region. Our mission is to serve and represent regional water supply interests and assist RW A members with protecting and enhancing the reliability, availability, affordability, and quality of water resources. R W A is currently implementing a Regional Water Efficiency Program designed to expand measures to help area water providers fulfill Water Forum and California Urban Water Conservation Council best management practices (BMPs).

PCWA is an active member of the Regional Water Authority and the RWA Regional Water Efficiency Program. We strongly support the PCW A applications entitled "Swimming Pool Cover Incentive," "DeWitt Center Water Use Efficiency Project," "Canal Lining", " Auburn-Bowman System Audit, Leak Detection and Repair", and "Water Lin Replacement Project."

The PCW A proposals further the ability of PCW A to meet their Water Forum Agreement commitments, and are fully compatible with the CALFED water quality, water supply, and environmental restoration objectives.

The Regional Water Authority recommends that the Department of Water Resources fund PCW A's proposals.

Sincerely,

Edward Winkler
Executive Director

21 links

cc: David Breninger